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# MAN'S GREAT CHARTER.

*AN EXPOSITION OF THE FIRST CHAPTER OF  
GENESIS.*

BY

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## PREFACE.

THE following pages are written in the belief that the latest results of physical research may be profitably studied in the light of the first chapter of Genesis, and that the literary and devotional study of the first chapter of Genesis may be assisted by the illumination afforded through physical discoveries.

I trust that the increase of knowledge may be the means of so setting forth the revelation recorded on the first page of the Bible, as to admit of its being read, even by toil-worn and wayfaring men, with all, or more than all, the benefit that was derived in days gone by.

Five years ago I preached a course of eight sermons on this subject to a country congregation, and, while preparing to give this instruction, some apparently fresh thoughts suggested themselves, which seemed to throw considerable light

upon the intellectual and practical significance of the Biblical prologue. This is my justification for venturing through this little book to address a larger audience.

No attempt will be made to discover the author or date of this document. Critical inquiries of such a nature may be intensely interesting and of great intellectual value, but the worth of the first chapter of Genesis is not determined by the result of these difficult studies.

The intrinsic value of the works of Shakespeare, Milton, Newton, and Darwin would not be lessened if their title-pages were all missing, so that they were thus left anonymous. And it is to a similar intrinsic value of the first chapter of Genesis that I wish to draw attention.

This story for many years gave the most satisfactory answer to the common human questions as to the origin of the world and the reality of man's moral nature. It solved the problem as nothing else did.

The poor ignorant man who sits upon a heap of stones by the wayside, eating his dinner of

bread and bacon, is receiving a direct satisfaction for the needs of his body ; there are deep fathomless mysteries connected with what he is doing, and about these he knows nothing, even the terms chemical analysis and laws of assimilation are a meaningless jargon to him, he is altogether indifferent to a most fascinating branch of knowledge directly connected with what he is doing, yet he is acting reasonably ; similarly, this man needs some direct satisfaction for his heart and mind ; something which, however presented, he shall be able to receive, and see for himself. Doubtless, there will be much learning associated with these things which will be a dead letter to him, but as it is with the body, so it is with the heart and mind, there is need of some direct satisfaction or nourishment. Moreover, we must not forget that all our intellectual edifices rest in the last resort upon a foundation of what we call self-evident truths, the affirmations of sense, reason, and conscience. Having made every allowance for the possibility of illusion, we must depend upon hearing and seeing for ourselves ; having been led step

by step through a long train of reasoning, we must depend for the start for each step, and for the finish, upon axiomatic truths, or truths which every one has to see for himself; and, notwithstanding the many diverse and contrary opinions as to what is right and what is wrong, the ground of the distinction, the evidence that there is a right and a wrong is within each man to perceive for himself.

I have attempted the humble task of wiping off some of the mist that has settled upon the mirror, so that a man may look for himself and see what he is and what he is like, as in the perfect law of liberty.

We have a document which without question is more than two thousand years old. If we know that its teaching was intelligible, acceptable, and needful so many centuries ago, and find that it remains intelligible, acceptable, and needful to-day; if we find that, notwithstanding the growth, revolution, and even revulsion there has been in the thoughts of mankind, it still answers reasonably and clearly certain questions which men seem made to ask and to which they can get no other

answer so satisfying; if it is so written that it continues to reflect the latest-won truths, and shines like nature itself, with further unapproached but attractive light, and invites men to realize in a fuller life an ever-widening liberty; then surely it has an intrinsic value and even authority of its own, and need not wait upon critical opinions as to when and how it was derived.

I am greatly indebted to the works of the late Prof. F. D. Maurice, the Rev. P. H. Mason, M.A., President of St. John's College, Cambridge, and of Dr. Westcott, Bishop of Durham. These eminently distinguished scholars have been occupied in separate departments of Biblical study, but all alike enforce the cardinal lesson of reverence for the words of Holy Scripture. They would also insist upon the necessity of having an open mind for the reception of truth from whatever quarter it may come.

I hope that these great lessons have not been wholly lost on me, and that what is here written may help to show how a jealous regard both for the sacred text and for the modern interpretation



of nature, issues in a simple recognition of their relationship.

On the presentment of two different aspects of truth one must not be compromised for the other, but a point of sight should be sought for and awaited which, in a clearer and wider survey, embraces both. The search may demand a sacrifice of whatever enhancement the prospect received from near and ancient boundaries, but this will be recompensed with a view incomparably grander when the higher standpoint is gained.

It is thus with the truths which attract us in works upon physical science on the one hand, and in the Bible on the other, which we see in *things* and physical laws, as well as in *persons* and moral laws, in the establishment and elucidation of the material order, as well as in the establishment and elucidation of the moral order ; we must not close our eyes to either truth, but try to climb higher and see them in their natural harmony.

Truth may have been embodied and embraced by such a representation as once freely clothed but now constricts it, which was a swaddling band, but is becoming a shroud.

Take, for example, Milton's description as follows :—

“ When God said,  
 Let the earth bring forth soul living in her kind,  
 Cattle and creeping things, and beast of the earth,  
 Each in their kind. The earth obey'd, and straight  
 Op'ning her fertile womb teem'd at a birth,  
 Innumerable living creatures, perfect forms,  
 Limb'd and full grown. Out of the ground up rose,  
 As from his lair the wild beast, where he wonns  
 In forest wild.

\* \* \* \* \*

The grassy clods now calved ; now half appear'd  
 The tawny lion pawing to get free  
 His hinder parts, then springs as broke from bonds,  
 And rampant shakes his brinded mane.”

Such a picture may have helped the unscientific mind to grasp the stupendous but necessary truths of a beginning or new departure and of an efficient cause, truths which need still to be realized, although Milton's particular expression of them may now be a hindrance rather than a help.

Conceptions relating to the whole visible universe have been subjected to a vast process of modification, yet the relationship between man

and the world remains unaltered, and its practical importance undiminished. So, likewise, a transformation may be wrought in our thoughts about the Bible, by eliminating the ignorance we have read into it, and by enforcing the lessons we have ignored, without in the least lessening its significance as a written medium of God's revelation.

The terms *rising* and *setting* applied to the apparent movements of the sun, and still retained, seemed for centuries a most literal way of stating a self-evident fact.

Similarly, some comments upon the first chapter of Genesis have been regarded as coincident in meaning with the text of the narrative itself, but are found only to have stated part of the truth, and not to have been exempt from error.

In both cases the truths embodied in the old interpretations, and which gave these their worth, continue as part of the fuller truth which further light reveals.

The trivial notions attached to this story have been disposed of by physical discoveries, but if this riddance induces us to read more carefully and with childlike confidence what is actually

written, we shall find that the account had been trifled with, and that further knowledge of God in nature and grace elucidates this first lesson. So we shall gain a Divine compensation for the loss of those childish conceptions. To render some assistance towards gaining this prize is the object with which my little book is written.



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## INTRODUCTION.

THE subject-matter of the first chapter of Genesis is one that must needs be unparalleled. The exceptionally foundational character of the subject. It is a pre-requisite in everything which might be suggested for comparison with it. What birth is to the individual, that our theme is to the whole of history. What the spring is to the watercourse, that the first origin is to the after-course of the world. What the earth is to the things built upon it, what the air is to lungs breathing it, what the sense of sight is to the appearances we perceive, such is the disparity between the subject-matter of the first chapter of Genesis and any topic in the world's wide range.

Here we are furnished with materials and tools. Materials may mean logs of wood, or a number of atoms, or *localized centres of force*, and tools may mean hatchets, or hands, or *properties*, or *laws*.

Here we are not only supplied with everything, but we ourselves are supplied. In ourselves, in our labours, and in our theories, we presuppose the mystery this record reveals. We are interwoven of the material, in the pattern, and by the agency, which are here introduced to us. Man manipulates what is already made. Human works and human workings, from the seemingly solid material achievement to the finest sensation and the most subtle mental effort, are altogether dependent upon that of which we read in the first chapter of Genesis. Man and his constructions imply God and His creation. We too often fail to realize the importance and significance of that which has always to be taken for granted.

“Explanations” of that which exists and lives, and feels and reasons, mostly leave untouched such fundamental obscurities, as existence, energy, sensation, and wisdom. The ground of all is ignored. The form is admired, the substance is disregarded; the picture is reckoned priceless, the artist is not reckoned at all; the landscape is lovely, the eye is forgotten; the organ of sight is arduously scrutinized, the sense of sight is passed

by as lacking significance. Sensation appears to be regarded as bearing stronger evidence to the existence of matter than to the existence of sense.

Cf. Mr. A. J. Balfour's "Defence of Philosophic Doubt," p. 184.

I grasp the arm of my chair and say, "Of this thing I am certain, it is a tangible existence, nothing is more positively true"; nevertheless, my feeling and judgment are more certain, more positively true, and are the ground of my perception of that tangible existence. We lay hold of *things*, and the very power by which we do so is sunk in oblivion, simply because it is not a *thing*. Thus the sceptre is wrung from the senses and given to their subjects; yes, given to their creations. The king is made to place his creature on the throne. Thought is a suborned witness for the omnipotence of *things*: the invisible is ignored and denied, although it is the only guarantee of the visible, which is worshipped; the work is had in all honour, while the workman is effaced or regarded as the offspring of his own handiwork. So it is that man with all his labour scarcely gets below the surface, which he rakes indefatigably but scarcely ventures to dig beneath.

Whilst freely using the words matter, gravity,

cohesion, laws, and others, which, with similar familiarity, refer to the most profound mysteries, and whilst practically dealing with the world by living and working, we generally neglect to ask, who or what it is that honours the drafts we ceaselessly draw on behalf of our theories as well as for our existence and for every process existence entails. Every road, every path, however narrow, leads to the Great Resource of all, and there is something lacking in the man who never finishes his journey.

This narrative invites us to look for once from within instead of from without, to consider that which is real rather than that which is apparent, the essential instead of the phenomenal, to think upon a beginning of that which we take for granted, or with regard to which we merely inquire as to its growth.

This narrative invites us to meditate upon the present strength and stay of ourselves and of the whole order in which we live, instead of being contented with the recognition of sequences.

The book of Genesis commences with the story not only of a great work, but of the great

foundational and preliminary work in and through which all other works, great and small, are wrought.

This work differs from other works not in degree, but in kind ; it is superior to all others, not because it compares favourably with them, but because it will not compare with them at all, being essential to each in its beginning, continuance, and completion.

Every thought and every feeling, every vital product and every vital process, every hour and every lesson, each law and each *property*, things and persons, body, mind, and conscience, life and light, are initiated, conditioned, and sustained by that which is the subject of the first chapter of Genesis.

Consider carefully that a beginning of the universe means not some new stupendous scheme of illumination, but rather the original impulse and principles upon which the vibration of every light-wave depends ; not the parcelling out of material, but the laws which the separation and shape of worlds outwardly express ; not the progressive development of forest trees from mould

or lichen, but the laying down of the very foundation of such development in the principles of heredity and variation; not a work prolonged through hours and ages, but a work of which the whole machinery of time was only one middle item; not the measureless improvement in the organs of the senses, such as eyes and ears and fingers, but that which spans what is to us the bridgeless gulf between organization and sensation; not man's advance in cultivation and civilization, but the embodiment of that spirit of reflection, aspiration, and endeavour by which his progressive advancement is achieved.

And what words have we to represent these transcendent processes? How shall we name facts so unfamiliar to thought, yet so fundamental, seeing that our vocabulary is moulded by all that is common-place and superficial?

Need of a special adaptation of language in dealing with this subject.

This peculiar singularity of the subject renders necessary a special use of the language in which it is set forth.

Greatness of the work and littleness of the words.

It is an indispensable preliminary to anything approaching an adequate estimate of the contents of the first page of the Bible, that both the great-

ness of the work and the littleness of the words be clearly recognized.

By its nature, the thing spoken of must be without parallel and without precedent, whilst, by the natural exigences of language, the words must be common words.

The facts related were prior to all human experience and expression. Yet, if the tale had to be told, it was necessary to use familiar words, such as were constantly associated with a state of things since established.

Success in understanding this story must be proportionate to our power of imagining a universe of things where none of the distinctions to which we are accustomed were yet wrought out.

Words of themselves cannot produce new conceptions in minds unprepared for them. The vocabulary at disposal for telling the story was of very limited capacity, being used for conveying only the light burdens imposed by the needs of man in an early stage of civilization. Therefore it is more than ever necessary to be kept in mind that words are only tokens, and that their value

Need of imagination.

Unfamiliar thoughts to be expressed by language fashioned upon what is most familiar



must be determined by the subject with which they deal.

Words transcend their etymology, they can also transcend their colloquial usage.

Just as any literary composition upon a common topic, in common words, would at once fall to pieces if its various parts were subjected to an etymological restoration, because its various symbols both in form and meaning have changed almost beyond recognition ; so must the story of such an unfamiliar fact as the first genesis of things utterly fail of its purpose if words are confined to their common-place signification. To say that a crafty knave means nothing worse than a clever boy, or that an asylum for idiots is merely a place where ordinary private personages can be free from molestation, is to speak etymological truth, but moral and practical falsehood. So, to limit words in an exceptional narrative to their common import may not lack an excuse, but must fail to find any justification, and would be equivalent to maintaining the value of a bank-note to be that of the paper and printer's ink of which it is composed.

In the case of an ordinary narrative there is an ascent from the origin of words up to their every-

day meaning; in the case of an extraordinary narrative we must rise from the common usage to that which the special nature of the subject demands.

The childish or even coarse notions that may be concealed within the root meanings of some of the Hebrew words employed in the first chapter of Genesis have just as much and just as little to do with the interpretation of the narrative, as the quite as childish and quite as coarse notions concealed within the root meanings of English words have to do with the newest treatise in our own language upon science or philosophy.

Moreover, this old story has to be translated into a language that did not exist for many centuries after the story was first told.

There are elements of ambiguity which necessarily exist in any verbal description composed in a living language. The processes of growth, assimilation, extrusion, and transmutation, render it impossible to make an adequate and permanent transposition of an ancient composition into modern language. The attempt to do so may be compared with trying to build a house of

Underlying  
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fixed.

which the beams and rafters should remain limbs and branches of growing trees. Words are subject to many vicissitudes of fortune. They may have a different significance for men of the same tongue who happen to be separated by a short space of time or country, and even for the same man under changing circumstances.

Impoverishment of popular vocabulary.

The increase of knowledge which generally enriches language has in one respect actually impoverished it. For words originally used to symbolize popular impressions are adopted into a professional nomenclature, and thus acquire an artificial definiteness by adaptation to a real definiteness lately discovered in the things to which these words are made to apply. This process of fluctuation and specializing is in constant operation, and renders a permanently satisfactory translation impossible.

Simple language an occasion of stumbling.

Moreover, the praiseworthy efforts to popularize the results of modern scholarship by the use of simple language meet with two obstacles in minds unaccustomed to reckon with the weakness and peculiarities of the natural genius of phraseology: the one is a dulness of comprehen-

sion which fails to receive anything but the meanest thoughts from common words, enveloping, for example, the Antipodes in a shroud of mystery as people walking upside down, the other is a tendency to identify a fact with its expression, and which would make a new kind of blasphemy out of the assertion that the skies were peopled by means of the telescope.

Tempered and whetted by the manifold experience and accumulated wisdom of many centuries, the human mind can still penetrate but a very little way into the profound, innermost recesses of things; much less can it make a means of access to the centre, that so, turning round, man might look from cause to effect. Therefore, also, we lack such a special diction as should exclusively and adequately express the parts and relations of this mighty theme.

Thus, in our late age, just as in the earlier one, when this document first appeared, it would be necessary to adapt for this special purpose words which are generally otherwise employed.

In the following few pages the reader's attention will be invited to the interesting fact

The treatment of this subject would still require an adapted phraseology.

The adaptation in Genesis conformable to custom.

that the particular adaptation of language adopted in the first chapter of Genesis is plentifully illustrated and exemplified in modern literature.

If the force of such considerations as have been advanced in this brief Introduction be fairly calculated in the estimate we make of the outline sketch with which the Bible begins, then its simplicity, accuracy, and fertility of thought and feeling will command for it the highest appreciation.

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## CHAPTER I.

THE great work to which the Biblical prologue introduces us, as to the very ground, atmosphere, and medium of all other achievements, is divided into six portions, the accounts of which respectively conclude: one day, a second day, a third day, a fourth day, a fifth day, the sixth day.

Days in the foundation of the universe.

Let us consider very carefully what is the sense here of this word day. It is the common word day, and we have to ask ourselves what its meaning can be in the wonderful connection in which we find it.

Use of the word day.  
i. The historic standpoint.

The following are some of the facts by means of which an answer to the question may be found: In the first place, it is to be noticed that the historic standpoint is before the existence of the solar system. Sun, moon, and stars have a place in the narrative, but subsequent to the use of this word day. Here is a fact to be as firmly

as possible fixed in the mind of any one who wishes to understand the story. The ordinance that causes the regular spells of light and darkness, by which the word day becomes the term for a measure of time, was a thing of the future.

Therefore the introduction of the notion of time into this phraseology is an obvious anachronism, and only became current through the lack of such conceptions as those which physical science has contributed to the further endowment of the human mind. We must banish every thought of a temporal unit as something at present unheard of, and which we find later to have been positively kept out of court by the very construction of the story.

This fact strips our common word day of some of its customary clothing ; but we shall soon find that it is not forced to dress itself in foreign or unbecoming habiliments. We shall not be driven to an arbitrary use of a familiar word.

Although it is necessarily set free from limitations which were then inexistent, the word still retains the nobler significance which belongs to it as a token, even in the modern verbal currency.

It is charged with ideas besides those which attach to its transitivity. We speak, for example, of long days in summer and short days in winter, which familiar forms of speech show plainly that a day is not merely a measure of time. Its meaning is not confined to the poor solitary fact that it passes away.

A day is a state, and not merely a span, it speaks of that *in* which as well as *during* which we live, by means of which, and not only in the course of which, we work. And it is evident from the exclusion of the temporal ingredient, to which allusion has already been made, that we must look to this deeper meaning, often hidden but existing in our common word day, for the significance belonging to it in the narrative before us.

This conclusion is confirmed by the next fact to be adduced for determining the value of the word in this connection. We find that the Biblical vocabulary contains the word with this super-temporal significance, and there never could have been another such opportunity for fixing this significance as in the commencement of a narrative where time is forced out of view, by being

Use of the word day.  
ii. The Biblical vocabulary.

taken up subsequently as merely part of the continuation of the story.

Joel iii. 15.  
Cf. Is. xxiv.  
23.

We will briefly illustrate the usage to which we have just referred. "The day of the Lord" is independent of the sun. The sun and the moon are darkened, and the stars withdraw their shining in the day of the Lord. "The day cometh, it burneth as a furnace; and all the proud, and all that work wickedness shall be stubble; and the day that cometh shall burn them up. . . . But unto you that fear my name shall the sun of righteousness arise."

Mal. iv. 1, 2.  
Cf. 2 Peter  
iii. 12.

Thus the day of judgment is not simply a certain time when there shall be judgment, but is judgment itself; it is the revelation of the fire and light of true searching and discriminating judgment. The New Testament contains similar language. St. Paul writes, "It is a very small thing that I should be judged of you, or of man's day. . . . Judge nothing before the time until the Lord come, who will both bring to light the hidden things of darkness, and make manifest the counsels of the hearts"; also, "If any man buildeth on the foundation gold, silver, costly stones, wood,

1 Cor. iv. 3 5.

1 Cor. iii. 12,  
13.

hay, stubble; each man's work shall be made manifest: for the day shall declare it, because it is revealed in fire."

Christ Himself said, "Abraham rejoiced to see St. John viii. 5. my day; and he saw it, and was glad. Verily, verily, I say unto you, Before Abraham was, I am." Zacharias prophesied of Christ as the Day-St. Luke i. 78, 79. spring from on high, which should shine upon them that sit in darkness and the shadow of death, and guide our feet into the way of peace: and St. Matthew recognized in the coming of St. Matt. iv. 16. Christ the fulfilment of Isaiah's prophecy: "The Is. ix. 2. Cf. St. Luke ii. 32. people which sat in darkness saw a great light; and to them which sat in the region and shadow of death, to them did light spring up."

The Lord acts as the light, He shines upon Cf. Eph. v. 14. men, and their thoughts are revealed to themselves by contact with Him. He Himself scatters the darkness, He is the Sun of Righteousness, His presence makes the day. Thus the *ἡ παρουσία*. Biblical vocabulary contains the word day apart from its temporal signification, which fact supports the natural conclusion as to the meaning of the word in its present connection deduced from

the order of physical things brought before us in the narrative.

Use of the  
word day.  
iii. The IV.  
Command-  
ment.

The fourth Commandment is the next piece of evidence to be adduced for determining the meaning of the word day in this narrative. We read : "Six days shalt thou labour, and do all thy work. . . . For *in* six days the Lord made heaven and earth, the sea, and all that in them *is*." It should be noticed that there is no Hebrew here for the preposition *in*, as is shown in the version of 1611 A.D. by the use of italics.

Here again the notion of time in relation to God's work would be obviously out of place, for if the six days of the Lord meant a period of time equivalent to the period of time denoted by the six days of our week, then the Commandment would be obeyed by one week's work in a man's life, or else it requires man to work a very much longer time than God worked ; the one alternative being absurd, and the other rendering the ground or reason of the Commandment utterly futile.

If it is not fatal to an interpretation that it involves the text in absurdity or futility, there is yet a further argument against the supposition

that the six days of the Lord denote a period of time, in the fact that the Israelites were commanded to observe a larger week of years, and a still larger one consisting of seven of these longer periods with the year of Jubilee for its Sabbath.

If it be objected that with any other interpretation the word day is used twice in the same context in different senses, it is only necessary to observe that in the one case it is used with respect to God, the substance, and in the other with respect to man, the image; and that an image has limitations which do not affect its original. God's days make man's days possible. God's working makes man's working possible. The commandment has appended to it not the reason only for its observance, but the ground which makes obedience practicable. The distinctive energies which in the fulness of God are simultaneous, may well be best realized in man by successive efforts. All that man is required to do in his periodic workings is provided for in God's working, the account of which we are about to study.

He in whom man lives and moves and has his Acts xvii. 28.  
being worketh even until now, and man is able to St. John v. 17.

Cor. xiii. 6. work because God works. There are diversities of workings, but the same God, who worketh all things in all.

Man made in the image of God, is required to work during periods consisting of six days each, and part of the reason why the term "six days" is used to characterize the operation of God may be to assure man that in the Divine energy there is such a supply for all his efforts as perfectly corresponds with his need. But more light will be thrown upon this as we proceed.

The fourth Commandment has been introduced here only to show that the sense of the word day, as referred to the working of God, is that of a substantive reality, and is the ground or cause, not merely the exemplar of man's working day. Man is not bidden to work every year fifty-two times the term during which God once worked, because God did so once work, but rather, man is bidden to do what God provides him with the means of doing; and the correspondence between God's days and man's days is like that between foundation and superstructure, or between substance and shadow, or between the original and its image.



Fourthly, for determining the meaning of this word we have the direct assertion, "God called the light day." This name was not given to the *phantom of succession*, to a measure of time, whether large or small. Thus again the narrative forbids us giving any time value to the word day, or using it as a chronological unit for measuring the interval between chaos and cosmos.

Use of the word day.  
iv. The assertion "God called the light day."

Moreover, the assertion is positive, and directs our attention to a phase of meaning which distinctly exists in our common word. It is the light of day, and not its transitiveness, that we have to dwell upon.

The advantage of the word day over the word light for its present purpose will be considered shortly. Here it will be worth while to spend a little time in thinking of the fulness of meaning which ancient and modern language has given to the word light.

Thought of materially, this ethereal element is indispensable in the world both for life and for loveliness. "Without light nature was without life, it was dead and inanimate. A benevolent

Lavoisier  
quoted in  
"A World  
before the  
Deluge,"  
p. 99.

God, in bestowing light, has spread on the surface of the earth organization, sentiment, and thought." Thus light is widely and richly suggestive, and corresponds with fundamental elements that are nameless in other spheres than space, and is the means of supplying an appropriate form of speech. Consider the following expressions from various kinds of literature as exemplifying the wide use of the phraseology based upon light.

Addison. "Cheerfulness keeps up a kind of day-light in the mind, and fills it with a steady and perpetual serenity."

Hume. "Refinement in the arts spread but a very faint light over this island."

Gibbon. "Their debts of honour (for in that light they have transmitted to us those of play), they discharged with the most romantic fidelity."

Macauley. A person's countenance "lighted up by the mingled lustre of intelligence and benevolence."

Darwin,  
"Descent." "The light reflected by the principle of gradation."

Geikie. "Astronomy, physics, and chemistry have in

late years all contributed to cast much light on the earliest stages of the earth's existence."

When things to be described are, for any reason, unknown to language, it is misleading to stigmatize as figurative the particular adaptation employed, when it may really be the plainest speech the language permits, and is only figurative in the sense in which nearly all language is figurative.

The few quotations given above from one or two works belonging to general literature will be a sufficient reminder of the extensive use of this diction of light. The fact being that physical light is suggestive of very much more than itself. It suggests what we have or what we need in other spheres. It suggests an ideal which should fulfil all that physical light indicates but cannot furnish. Could this ideal be found, it would deserve the name light more than does sunshine which has only suggested, and been as an index to the great reality.

Therefore, St. John calls Christ the true Light, <sup>τὸ φῶς τὸ ἀληθινόν.</sup> using an adjective which signifies not only the reality, but the completeness of the light, which

Archbishop  
Trench,  
"Synonyms  
of N.T.,"  
p. 26.

is not necessarily opposed to the *false*, but very often to the shadowy and outlinear. So a tree may be an oak, and yet fall very short of being all that the oak suggests; it may fail to express its *mother-idea*; it may be weak and tender, and at the mercy of every breeze that blows: we may never see an oak that quite fulfils our idea of what an oak should be; but, if we should, we might say of it, "that is a true oak." So, too, when we speak of a true man, we often mean much more than that the man is truthful, or that he is a man in contrast with a beast or a plant; rather, we mean to infer that we have an idea of what a man ought to be, and that this particular individual approaches or realizes our idea. Now, light suggests something that should do for other parts of nature what light does in its own place; it suggests something similar for the intellect and for morals; it helps us to grasp thoughts far transcending itself, as a proper name calls to mind a person. St. John believed that in Christ there was all this which light indicates, but is not, so he calls Christ the true Light.

St. John commences his gospel in words that

recall the first chapter of Genesis, saying that the Word, whom he identifies with the light, already was at the moment marked by *in the beginning* St. John i. 1-9. *Ibid.* Prof. Westcott *in loc.* and that *all things were made through Him*, and that *in Him was life*; and the life was the light of men—and *there was the true light (even the light) which lighteth every man, coming into the world.*

Thus, before anything was made, a Being existed whose nature and character anticipated and included every species of illumination. The light is an expressive name for Him who quickens and awakens and discloses and distinguishes and adorns and directs and supervises throughout the realms of existence.

In his "Advancement of Learning" Bacon remarks, "To descend from spirits and intellectual forms to sensible and material forms, we read the first form that was created was Light, which hath a relation and correspondence in nature and corporal things to knowledge in spirits and incorporeal things." Similarly, in the same writer's "Essay of Truth," we read, "The first creature of God, in the works of the days, was the light of the sense; the last was the light of reason; and

His Sabbath work, even since, is the illumination of His spirit. First He breathed light upon the face of matter, or chaos; then He breathed light into the face of man; and still He breatheth and inspireth light into the face of His chosen." This

1 St. John i. 5, He does because He is light and THE FATHER OF  
St. James i. 17 LIGHTS.

Use of the  
word day,  
v. These days  
are made, not  
spent.

Fifthly and lastly, it is shown by the first occurrence of the word that a day is something which God makes, not which He spends. "God said, Let there be light; and there was light. And God called the light Day." Moreover, God said, "Let there be lights in the firmament of the heaven, to divide the day from the night; and let them be for days and years. And God made the two great lights; the greater light to rule the day, and the lesser light to rule the night."

Thus God is represented as making days, and making the whole ordinance by which the days we spend are made, and as making day before He made that arrangement, which gives a time value to our word day.

The thought of God as being timeless is presented here in the simplest and most convincing

manner. So far as we have the capacity to conceive it, just so far do we find it here expressed that God makes time.

These five considerations lead to the conclusion that the word day in the first chapter of Genesis is free from time, and is full of light; that it means a luminous condition which God made, a quickening principle, a first necessity of some thing or some work which exists or is done by means of it. Therefore each of these six days is a distinct portion of the work, each is an effulgence of the whole light of creation, each is the cause, basis, and medium, the formative and energizing *idea* of a whole department of the world.

Use of the  
word day.  
Conclusion.

The day of physical illumination, the day of vegetation, the day of life, are not periods of time in which light, vegetation, and life were respectively formed, but the lucent principles or fundamental processes of the things themselves, in which each luminary, plant, or animal has its origin, through which it is constituted, and by which it is conditioned. Day is not a time-word, but stands for that state or those laws of exis-

tence by means of which anything is what it is, or for the very essence of that to which it is related. These six days are THE LIGHT OF NATURE.

This laboured attempt to disclose the meaning of the word day stands in marked contrast with the easy simplicity of the Biblical narrative; just as the drudgery of scouring a mirror clean from the consequences of neglect and misuse contrasts severely with the calm, spontaneous service rendered by the mirror itself, which seems to mock the fitfulness and fatigue of human endeavour. But as every inelegance in the process of cleansing is forgotten in the result, so whatever tiresome signs of effort may be visible in this investigation into the meaning of a single word, they will need little apology, if some of the irrelevant notions defacing the narrative have been removed, allowing the story to be understood more simply as it is told.

Use of the words night, evening, and morning.

Having arrived at a conclusion as to the sense in which the word day is used, we will now consider its attendant terms night, evening, and morning.



In verses 2 to 5 we read: "Darkness was upon the face of the deep. God said, Let there be light: and there was light. And God divided the light from the darkness. And God called the light Day, and the darkness he called Night. And there was evening and there was morning, one day."

Here is described the process of making day. It is a work beginning in the night, in a much more literal sense than the general usage of the words. This is not commencing a work during the night, but upon the night itself. Darkness was upon the face of the deep, and God said, "Let there be light."

Now, after we are told of the production of light, the story goes on to say that God divided the light from the darkness, implying that day was preceded by a state in which light and darkness were mingled, that is to say, by a condition of twilight. The darkness was lightened, but not dispelled. This stage was followed by a clearer light. And the declaration that God called the light day is made after this division of light and darkness.

A simple explanation is thus given of the phrase, "and there was evening and there was morning, one day."

The night or darkness was followed by the mingled state, or evening, and this by morning, which ushered in day one. So was begun a lasting day, which still is wherever light is, which is limited by darkness, not by time, which we read of as brought out of darkness through evening to morning.

Thus with the most ordinary words the mighty works of God are related. The particular shades of meaning in the common words which lend themselves to the narrative are accentuated by the obliteration of certain local colours which generally accompany them. Time is eliminated from the significance of the word day, and consequently from its accompanying terms. The order—night, evening, morning, day—emphasizes the timelessness of God's activity, and, in addition, indicates its luminous progressiveness. With God, evening leads to morning, the mingled state of light and darkness prophesies the victory of day. By retaining these common words and reversing their general

sequence the truth is brought out that God makes these days, that He manifests them gradually, that they are consummated in the attainment of morning light, thus contrasting with works that man carries on during the day and finishes at night.

The common Hebrew word for evening which Jer. xxv. 20-26. is used here is exactly that which is elsewhere translated "*mingled* people," showing that the idea of the mingling of light and darkness was prominent in the word. Our English "evening" does not contain this thought, being supposed etymologically to signify the "after" part of the day. But every one Prof. Skeat. can mentally travel in an instant from the word to the thing, and observe, without the aid of etymology, that evening, whatever word symbolizes it, is the mingled state of obscurity or gloaming, neither night nor day, but something between the two.

Unless we are careful to maintain the point of view of the narrative, which is previous to the sun's installation; and unless we keep close to its own defined meanings of day and night; and unless we follow its own order from night to a mingled state of light and darkness, and so to daylight; we shall be betrayed by the tendency of

our feeble, time-bound and phrase-bound imaginations, into reading in a night between evening and morning.

The order—evening, night, dawn, day—depending upon a luminary is so habitual to our minds and language, that the sequence of stages in the process of making day *ab initio*, however literally expressed, is more easily disregarded than recognized.

There was no ready-made sun to rise and dispel the darkness and bestow a day. Night was succeeded by evening, evening by morning. Thus the word evening indicates the gradual transition towards a morning light under the unique circumstances of there being no sun to produce it.

This intermediate position of evening, as well as the distinction and substantive reality of God's days as compared with this particular planet's time periods, seem illustrated by a passage in the

*Zech. xiv. 1-7.*

book of Zechariah : "Behold, a day of the Lord cometh," saith the prophet, "and it shall come to pass in that day, that the light shall not be with brightness and with gloom : but it shall be one

day which is known unto the Lord ; not day, and not night : but it shall come to pass, that at evening time there shall be light."

A modern instance will exemplify the universal application of this mode of expression. "In the domain now under review," writes Professor Tyndall, "men of science had first to work their way from darkness to twilight, and from twilight into day." Of course this refers to the discovery of day, whereas Genesis refers to the making of day.

We can now discern why, in this narrative, the preference is given to the word day over the word light. God called the light day, directing our attention at once to that sense of the word which in this case includes all the meaning of light, for the temporal limitations which usually accompany the thought of daylight are excluded by the historic standpoint. Whereas the word day has this serviceable superiority over the word light, that it suggests and makes available its companion words night, evening, and morning : a series of words which lend themselves with the utmost facility to the expression of progress, while, in

"Fragments  
of Science,"  
Vol ii, p. 340

Superiority  
of the word  
day over the  
word light,  
for the pur-  
pose.

the possession of an objective background, they have an enormous advantage over mere abstract terms.

Such words assist the mind as do the parables by putting into requisition a simple commonplace of the senses, as a fixed centre, about which a thoughtful mind can describe the arc, circle or sphere of which it is capable.

It is scarcely possible to conceive a form of expression for the idea of a secret, unobtrusive beginning, and a continuous improvement unto a final perfection, which would be so generally applicable and so easily understood as that supplied by these words in this order—night, evening, morning, day.

The first part  
of the work  
supplies a  
terminology  
for the  
remainder.

This language, moulded upon the first division of the work, provides a terminology for the rest. Each work is a day or light which is brought to morning; each is an enduring state which conditions a whole domain of the universe; each is manifested gradually; in each the evening or state of obscurity leads to morning. In Genesis *day* means *light*, and the kind of light is relative to that which it illuminates. Each of these six days

is the light of its own proper part of the luminously ordered whole. Each, when it becomes perfect, is called a day, a day begun, for *there was morning one day, there was morning a second day, and similarly, until there was morning the sixth day.*

The first day of the six was material light ; the second was the diaphanous and essential firmament, light-sustaining and life-supporting, the bond of intercourse for all creatures ; the third was life according to the modern use of the word, the principle underlying growth, assimilation, and heredity ; the fourth was the regulative institution of the heavenly bodies which has ordered men's lives, guided their travels, instigated and instructed their minds, inspired and elevated their aspirations ; the fifth day was sentient life ; and the sixth was the light of reason, self-determination, imagination, conscientiousness, and religion.

The Hexameron and its development.

The language employed not only expresses the gradual opening out or disclosure of each of these days separately, but it may, moreover, indicate the emanation of one from another, pointing not only to the development of each day, but further still,

to the development of the Hexaemeron, or a single whole, consisting when completed, of six days.

Bearing upon this thought it is to be observed that there is no night mentioned as preceding any of these days except that before day one.

The significance of this peculiarity will perhaps be made plain if we study the different shade of meaning that would have been presented by the phrase, "and there was night and there was evening and there was morning a second day," or "and there was night and there was dawn and there was morning a second day." Either of which would give the impression that these days were separate and isolated, while the latter might seem to imply that a perfect external luminary had arisen as the light of this component province of the whole cosmical system, instead of the advent of a gradual immanent light involving the very existence of the order it illumines.

On the other hand, the night being mentioned only once for all, together with the use of the word evening instead of dawn, implies the unity of the whole work, and expresses a luminous continuity of progress from day unto day, a progress



marked by the rising of *another morn on mid-*  
*noon.* We have already seen that this language  
 has been so fashioned by the theme treated of,  
 and the mode of treatment, that the word evening  
 foreshadows morning; but if a thought could be  
 grasped of some connection between day and day,  
 between one lasting luminous work and another  
 lasting luminous work, between one sort of light  
 and another sort of light, then the natural  
 association of the word evening prepares it to  
 express this thought.

Cf. "Paradise  
 Lost," v. 310,  
 311.

A new science sometimes springs from one  
 already established, and little by little comes to  
 occupy a distinct field of its own without dis-  
 placing its parent science; a new industry starts  
 from an old but not necessarily decayed one,  
 without destroying its parent industry; so  
 apparently a new day or light may originate  
 within one already formed, and gradually come to  
 a distinct morning of its own, without causing any  
 declining in the day or light in which it is  
 generated.

Thus the word evening may retain its common  
 backward reference to light, in addition to the

forward reference which the construction of this story has adapted to it. So it may mark an amorphous state in the forward movement from light to light, and guard the distinctions announced by the days from any notion of disjointed separateness.

This language not only expresses the progressive development of each order of the universe, but also the progressive development of order from preceding order, or to use another form of phraseology, this diction based on the facts of night, evening, morning, and day, speaks in the simplest way of an evolution of law, in addition to an evolution according to law.

Special designations of two days.  
i. The epithet *one* not *first*.

Two of these days are qualified in a special manner. That which is first of the six is not described as *first*, but as *one*. And the sixth is the only day distinguished by the definite article.

God called the made light *day*; but this was not the first light, it was only number one of a series of made lights or days. God, the Father of lights, is Himself light. All other lights are but namesakes of this true light. Every genuine

light springs from Him ; He, the ideal light, is the ultimate source of each specific light. This absolute priority is kept inviolate by the use here of the word "one" instead of "first," so that to material light only a relative precedence is ascribed.

The particular definiteness of the sixth day is fully warranted by the fact that this day brings to perfection a number of associated, not isolated, days. Whether these days are, as we have reason to suppose, actually related and organically connected, or are merely distinct component rays of the light of nature, they make a perfect whole.

Special designations of two days.  
ii. Use of the definite article with the sixth day.

These days form a perfect creation, which, however, is not a complete thing in itself, but is in absolute dependence upon God. The circle of creation is perfected by this sixth day, for at length there is a capacity for God Himself in the human heart. But creation is only completed when the uncreated light fills this capacity ; when the created receptacle receives the uncreated complement, being filled with all the fulness of God.

Eph. iii. 19.

The spiritual light is first ; and creation was perfected when there was a recipient fitted to apprehend this light. Creation is complete in so far as it is actually susceptible of God.

Thus we easily perceive why the word *one*, rather than the word *first*, should be chosen for material light, the typical but lowest in an ascending scale of days, through which days the idea of light is amplified step by step, until it is enshrined in humanity. We also recognize the appropriateness of the use of the definite article with the sixth day, which is the consummation of the whole light of creation.

The seventh  
day.

A consideration of the account given of the seventh day will confirm several of the conclusions at which we have arrived from a review of the other available evidence. Our narrative is continued into the second chapter of Genesis, where we read : “ *On* the seventh day God finished—and he rested *on* the seventh day—and God blessed the seventh day and hallowed it ; because that *in* it He rested,” &c.

We must notice three things in this account : first, the prepositions *on* and *in* are represented in

the Hebrew, and in each case by the same prepositional prefix *béth*; secondly, this day is not simply called blessed and holy, but it is blessed and holy, because in it God rested; thirdly, there is no evening or morning, no gradual becoming, of this day or light mentioned.

If the general view we have adopted be correct, the word day here must signify light; it must be real as a state or condition; it must be independent of time; in itself there must be the qualities of blessedness and holiness; and further, it must be exceptional in the absence of development. These conditions are satisfied almost to the letter where St. Paul speaks of the blessed and <sup>1 Tim. vi. 15</sup><sub>16.</sub> only Potentate dwelling in light unapproachable. And St. James says, "Every good gift and every <sup>St. James 1.</sup><sub>17.</sub> perfect boon is from above, coming down from the Father of lights, with whom can be no variation, neither shadow that is cast by turning."

Thus the light of God is first and last. In itself it is not subject to variation or development, but through created days there had been prepared that which might receive and reflect this uncreated

Cf. 1 Pet. ii. 9. spiritual light, that which might show forth the excellences of Him who called it out of darkness into His marvellous light.

2 Cor. iv. 4.  
2 Cor. iv. 6. This possibility is realized in the dawning upon men of the light of the Gospel of the glory of Christ, who is the image of God. And St. Paul draws attention to the unity of creation by his uniformity of language, where he says, "seeing it is God that said, Light shall shine out of darkness who shined in our hearts, to give the light of the knowledge of the glory of God in the face of Jesus Christ."

The Sabbath. The historic Sabbath, first after, and secondly before, six days' work; the Urim (lights); the Shekinah; the shining of the face of Moses; the pure golden candlestick of one piece, and its seven lamps fed with pure olive oil, one of which was perhaps kept alight continually; these symbolized the light which shineth without burning out, the Dayspring from on high, expressed in the Transfiguration, and incarnated in Jesus who is the fulfilment of the Sabbath.

St. Luke i. 78. The week. Our week has been made subservient as a symbol, and has been used as a means by which

man can apprehend the workfulness and restfulness of his Divine Architype.

The seventh day, without beginning or end, marks the changeless attributes of God; the six days whose beginnings are noted, but of whose ends no hint is given, mark the reality of the Divine activity. Each of the six days is brought to morning. All six are continued. Man lives in these six days. The world was made in six days, in six parts each of which is a day. It is still sustained by God as a world of six days, the constitution of which rests upon a sixfold light. The light of nature is maintained by the light of God. Man's working being divided into sextupal parts is typical of the Divine working. Man's rest is on the changelessness of his Creator; the character of that rest should correspond with the character of that in God which abounds beyond creative activity. Man's serial week repeated is a practical representation of God's synthetic and simultaneous week continued, the one being an image or shadow of the other. Yet, although time may be a mere shadow shaped by our weakness, nevertheless, by working in that

shadow to bring something to *fuller day* we may, by our little labours, show in whose image we are created.

The exposition given above of some of the distinctive phraseology of the first chapter of Genesis harmonizes with that we find on the last pages of the Bible, where we read of a city that hath no need of the sun, neither of the moon to shine upon it: for the glory of God did lighten it, and the lamp thereof *is* the Lamb. And the gates thereof shall in no wise be shut by day (for there shall be no night there).

Rev. xxi. 23-25.  
Cf. Rev. xxii. 5.

The closing chapter of the Bible corresponds with its preface. The last chapter of the Revelation is, in thought and language, a fitting sequel to the first chapter of Genesis.

The record of Revelation is a history of the dawn, the struggle, and the victory of light. There are many evenings, but they lead to mornings, and at last this evening-to-morning process will lead to the Perfect Day.

Cf. Dan. viii. 14-26.  
Prov. iv. 18.  
Cf. Col. i. 12.  
Zech. xiv. 17.

Whatever be the destiny in store for this world and of the days whose mornings are here chronicled, they will have attained a glorious consumma-



tion when mankind, having escaped from corruption and partaken of the Divine Nature, rests 2 Pet. i. 4. securely within the light of God.

“To your question now,  
Which touches on the workman and his work,  
‘Let there be light, and there was light’:

’Tis so.

For was, and is, and will be, are but is;  
And all creation is one act at once,  
The birth of light: but we that are not all,  
As parts, can see but parts, now this, now that,  
And live, perforce, from thought to thought, and make  
One act a phantom of succession: thus  
Our weakness somehow shapes the shadow Time,  
But in the shadow will we work, and mould  
The woman to the fuller day.”

TENNYSON, “The Princess,” III.



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## CHAPTER II.

WE will now consider in further detail the accounts of these six days, using for illustration a few of the facts and theories which the votaries of physical science have discovered and propounded.

Students of physics, having discarded the fanciful theories of their predecessors and become earnest seekers after truth, have been rewarded with discoveries or revelations which reflect light upon this first lesson in the Biblical record of Revelation.

In His own way the Holy Spirit makes the first chapter of Genesis intelligible and suitable to the present age.

IN THE BEGINNING GOD CREATED THE HEAVEN  
AND THE EARTH.

Both our standard versions admit the thought of something more absolute than is warranted by

the original, for the definite article is an unauthorized insertion to accommodate the sentence to English ears. Hebrew has no indefinite article, and the definite article is not used with "beginning," as it is with "heaven" and "earth." This shows, by a very simple instance, the impossibility of making a translation the exact counterpart of its original, it must unavoidably admit or omit something which the original omits or admits. Nor should we ascribe to pedantic trifling the taking notice of such niceties as this.

We have seen that this narrative has avoided the use of the word "first" for that which is such only in a limited sense and relatively to a particular series, and that it has distinguished the sixth and consummating item of that series by qualifying it alone with the definite article.

A style impressed with such marked discrimination demands, on being reproduced in a foreign language, most carefully-chosen expressions, and where coincidence of meaning is unobtainable, simple justice to the original requires the discrepancy to be pointed out.

This beginning, then, is such an one as man looks for or is able to think about. There is a background; but, for us and for the purpose in hand, this beginning is a starting-point.

Cf. Dr. Westcott on 1 John i. 1.

*The heaven and the earth.* We subsequently read of God making the firmament and calling it heaven, preparing the dry land and calling it earth, making the sun and moon and setting them in the firmament. Before these events happened—that is, before the firmament, the dry land, and the sun and moon were made or differentiated—this expression, “the heaven and the earth,” would denote the whole material constituents of the universe.

“God *created* the heaven and the earth.” We must notice the word “create.” It is only used of three events in the whole work.

Our human words are being applied to the vast and profound operations which lay the foundations of worlds, and their meanings are magnified together so as to retain something of a relative proportion between themselves.

The comparative rarity of the Hebrew word

ברא  
עשה

“create” is seen by contrast with the frequent recurrence of the word “make.” For notwithstanding the natural fact that it is very often employed with direct reference to the work we are considering, as, for example, in the title Creator, yet altogether it is used in the Bible less than sixty times, whereas the original for “make” occurs upwards of 2,600 times.

The less common word “create,” is kept here for representing three cardinal moments of the Divine energy.

Exod. xx. 11.

When the phrase “heaven and earth” in the fourth Commandment is used not for the formative material, but for the ordered whole produced by the six days, then it is said, “Six days the Lord *made* heaven and earth.”

Man can neither make nor destroy matter. This palpable stuff of the universe is supposed to consist of very small particles called atoms. These indivisible entities are believed to be so very tiny “that if a drop of water were magnified until it was the size of the earth, and the atoms of which it was composed were correspondingly magnified,” they would appear no larger than



cricket balls. A single drop is as much larger than an atom, as the whole world is larger than a cricket ball.

Notwithstanding this superlative smallness, each atom is supposed to be as well defined as *a manufactured article*. Possibly the substance of these atoms is similar in all, so that the difference between one sort of material and another may be due to size, form, and arrangement, rather than to any fundamental difference in matter itself.

The doctrine of evolution "sets out from a given point in time, at which it assumes a definite arrangement of material (and mental) elements to have obtained."

From Art. in  
"Ency.  
Brit."  
"Evolution,"  
by James  
Sully.

"Of the beginning of the universe, says Professor Clifford, we know nothing at all. Again, Professor J. Clerk-Maxwell tells us that we must from the first assume an infinite number of molecules exactly alike in their weight and rate of vibration; and he distinctly argues against the supposition that this system of like elements can have been evolved. It is plain that every doctrine of evolution must assume some definite initial arrangement which is supposed to contain

the possibilities of the order which we find to be evolved, and no other possibility."

Such, then, at present is the scientific limitation. Beyond the ascertained course of development, beyond the assumed course of development, beyond any conceivable course of development, lies the substance which develops; and this, in its twofold character of body and soul, the outward material substance which is the subject of growth, and the inward spiritual substance which is the cause of growth. The mystery of the rich autumn fields was hidden long since in the void furrows of the heavy dull soil; the garnered grain has no secret that was not bosomed in the scattered seed; and the present "heaven and earth" is only the outgrowth of the germinal "heaven and earth" we read of in this first verse of the first chapter of Genesis. The laborious interest of the husbandman, the watchful interest of the artist, and the studious interest of the man of science, are each centred on a limited process. The toil of a Triptolemus, of a Claude, and of a Linnæus is exhausted upon a mere episode of the Drama of Creation.

Moreover, we must carefully observe the character of this limitation. It is not like the boundary of an estate which owes nothing to what is beyond. It does not confine a self-sufficing whole ; rather, it is the line which separates a superstructure from its foundation, or the visible part of a tree from its roots. The problem of the world can no more be solved by a survey which ignores all beyond this limitation, than can the rainbow be explained by the action of simply terrestrial causes.

Beyond the evolution of heaven and earth there is need of some fundamental provision involving heaven and earth. This is a *sine quâ non* not only of scientific theory, but even of scientific speculation. Naturally, human language possesses no special word for a work so far transcending not only human work, but even human conception of work. It is only possible to employ the least common of familiar words, and this accommodation is made in the sentence, "God CREATED the heaven and the earth."

This constitutive substance appears to be denominated in the second verse by the three

words, earth, deep, and waters; and to be qualified as waste, void, and dark. So we are brought into the presence of the formless mass of undifferentiated world-making material.

"THE SPIRIT OF GOD MOVED UPON THE FACE OF THE WATERS. AND GOD SAID, LET THERE BE LIGHT: AND THERE WAS LIGHT."

The Spirit of God moved upon the fluid material, and it became by the energy imparted to it a faintly luminous nebula.

The teaching of the text will be illustrated by the following brief citations from modern scientific writers:—

Prof. Tyndall, "Fragments of Science," vol. I., pp. 34-7.

"Darkness might be defined as æther at rest; light as æther in motion. Both light and heat are modes of motion."

J. Norman Lockyer, F.R.S., "Manchester Science Lectures," p. 109.

"The normal condition of everything in nature, far or near, is in this state of unrest, and if it were not so there would be for us no external world."

Prof. G. Clerk-Maxwell, "Ency. Brit.," viii., 569.

"Light is not a substance, but a process going on in a substance."

Prof. Tyndall, "Fragments of Science," vol. I., p. 72.

"The working power of nature consists of actual or potential motion, of which all its phenomena are but special forms."

As the matter of this *fluid light* condensed, the darkling glow was superseded by a growing brilliance, the vast distinction between light and darkness was gradually manifested, and to the perfected light God gave the name of day. From night there was a transition to some degree of light, producing the mingled state of evening; thence, light still increasing, dawned the morning of *day one*, the type and model of all God's works.

“AND GOD SAID, LET THERE BE A FIRMAMENT IN THE MIDST OF THE WATERS, AND LET IT DIVIDE THE WATERS FROM THE WATERS. AND GOD MADE THE FIRMAMENT, AND DIVIDED THE WATERS WHICH WERE UNDER THE FIRMAMENT FROM THE WATERS WHICH WERE ABOVE THE FIRMAMENT.”

The following passage from the Book of Micah Micah i. 4. may preserve our imagination from an involuntary anachronism and help to fix our minds with some precision upon the sort of “waters” with which the text is dealing: “The mountains shall be molten under him, and the valleys shall be cleft, as wax before the fire, as waters that are poured down a steep place.”

In the presence of fluid light, with sun, moon, and stars all in the distant future, on the eve of a dividing firmament, which, as we find in the 16th and 17th verses, extends not to earth's cloud-land, but to the sun, moon, and stars; we must not, in justice to the narrative, relax our mental effort so as to let our thoughts lapse amidst familiar sights and lesser distinctions.

The students of physics teach us that the glowing earth stuff was so moved as to become divided, and that our own planet was formed from matter which was once contiguous with that which now forms the moon and the sun. We are also told that throughout the space which separates stars and planets and satellites, there is a light-conveying æther, capable of penetrating all transparent bodies, and probably opaque bodies too, and that within certain limits the earth is surrounded by an atmosphere of oxygen and nitrogen.

God called this dividing firmament heaven. Heaven is a name frequently used for the Spirit's abode. To those who are aware how entirely all living things depend upon this which God called heaven, the fitness of such an adaptation of the

word to a higher purpose will be plainly apparent. This heaven is the medium of all the benefits dispensed by the sun, moon, and stars. It supports light and heat and life on the earth. It enables fellow-creatures to have communion one with another. It is invisible, and yet is nearer Cf. St. Luke xvii. 21. and in closer relation to us than anything we can see. We dwell in it and it dwells in us. We cannot embrace it, but it embraces us. It submits to our apprehension, while it entirely baffles our comprehension.

This enlightening and quickening heaven is a second day.

In any connotation of the sentence, "*and evening was and morning was day a second*," it must be perceived that, whatever else the word day might mean, it could not mean a measure of time. The notion of time would be utterly irrelevant, being obviously excluded by the fact that the giving of the ordinance itself upon which time depends has a place in the narrative, but a subsequent place.

"Upon the day appear'd  
A day new-ris'n."

Dante,  
"Paradise,"  
217.

This day or light is the heaven by which we

see and in which we live. Such is a second day.

“AND GOD SAID, LET THE WATERS UNDER THE HEAVEN BE GATHERED TOGETHER INTO ONE PLACE, AND LET THE DRY LAND APPEAR : AND IT WAS SO. AND GOD CALLED THE DRY LAND EARTH ; AND THE GATHERING TOGETHER OF THE WATERS CALLED HE SEAS : AND GOD SAW THAT IT WAS GOOD.”

Drawing near to that which to us is the wonted state of things, words begin to assume their common specific significance. Those which were massed together for a designation of the undifferentiated material become severalized as the universe changes from a homogeneous whole to a whole of united distinctions.

The firmament has received its name of heaven, and here the dry land or dryness receives the name of earth, and the waters, gaining more of the characteristics of the familiar fluid, receive the name of seas. Professor Geikie says that under the pressure of the primeval atmosphere the first condensed water might have had the temperature of a dull red heat or of molten lead.

Text Book of  
Geology, p.34.

Class Book of  
Geology, p.  
303.



The Bible student should not find it overwhelmingly difficult to accustom himself to ideas, such as this, which are suggested by physical science. For let him give careful attention to the thoughts contained in the following passages :—

“The day cometh, it burneth as a furnace.” Mal. iv. 1-3.

“The mountains quake at Him, and the hills melt; and the earth is upheaved at His presence.” Nahum. i. 5.  
Cf. Ps. xcvii. 5.

“For the Lord, the God of hosts, is he that toucheth the land and it melteth, all that dwell therein shall mourn; and it shall rise up wholly like the river; and shall sink again, like the river of Egypt.” Amos ix. 5.  
Cf. 2 Pet. iii. 10, 12, 13.

“The mountains rose, the valleys sank Ps. civ. 8.

Unto the place which thou hadst founded for them.”

In such passages the thought of the solid fabric of the world being reduced to a condition like water is distinctly presented. And a child could understand that if the mountains should be again molten, and the valleys cleft, as wax before the fire, as waters that are poured down a steep place; then what we now know as water would at once be evaporated, and when the re-cooling took Micah i. 4.

place would be the last of the visible world to resume its familiar form.

The "water" would gradually give up to common water all such characteristics as made the name appropriate for that which, being unknown, was without a special name of its own.

Heaven, earth, and water gradually assume the familiar distinctive forms to which these words severally apply.

Dr. A. R.  
Wallace,  
"Darwin-  
ism," p. 346.

The waters of the ocean are sufficient to cover the whole globe to a depth of two miles, but the manner of cooling by which the earth reached its present condition was such as to make its surface sufficiently uneven to cause the existence of dry land.

Cf. "Ency.  
Brit.," Art.  
"Founding."

Our usual inquiries in such a case stop short at discovering the manner of cooling, and upon this we base scientific theories of the world and practical calculations for the mechanical arts. Iron increases in volume at the moment of passage from the liquid to the solid state, and decreases from the moment of solidification down to the ordinary temperature. Each metal has its own peculiar rate of contraction and expansion, which

Cf. Diet. of  
Brand & Cox,  
Art.  
"Metals."

is interestingly exemplified in the case of a certain small bronze statue which was made with an iron core; the different measure of contraction in the two metals has caused the figure to split. Also the parting with excess of temperature takes a certain time in proportion to the surrounding conditions. A large casting, as, for example, a piece of ordnance or a heavy bell, will take several weeks to cool. The constancy of facts of this kind having been sufficiently demonstrated to be relied upon, advantage is taken of it in metal work, and upon a similar constancy theories are based as to the time occupied and the incidents that accompanied the solidifying and cooling the material which forms our planet. Taking this "constancy" for granted, we ask, how long the earth will have taken to cool down, and what effects will have followed the changes of temperature.

As a rule, we do not sufficiently dwell upon the *virtue* and universal significance of this constancy. We study the results of an ascertainable process at work in material particles of the world, but we do not usually think of the cause behind the process so as to continue our investigation by seeking after

"Ency.  
Brit."  
Art. "Metal-  
work."

the origin of there being any process at all, and of there being this particular process, crowned with so transcendent a consummation, when an infinitude of other processes might be imagined which would have entirely different results. Yet it is to this principal origin, rather than to any secondary occasion, that we must attribute the existence of an ordered universe instead of a chaos or nothing.

As a particular instance, the distribution of land and water, one of the first things requisite for making the earth habitable, has been occasioned by the action of secondary causes, and by such a "constancy" as that of which we have just spoken, and all this is the field of physical science; but this surface field is supported by the granite foundations of the living rock beneath, and is wrapped in the mantle of heaven above, and therefore it exists, and is fruitful; so by whatever means occasioned the distribution of land and water, like everything else, has its fundamental dependence upon the principal cause of all. To this our narrative points by declaring that God said, "Let the waters be gathered into one place,

and let the dry land appear." There is no other final explanation of the event; there is no other principle of promulgation for the laws of cooling, shrinking, and settling.

Apparently there is no new departure here of sufficient magnitude to be denoted by the word "create" or "make," nor have we reached a new day.

"AND GOD SAID, LET THE EARTH PUT FORTH GRASS, HERB YIELDING SEED, (AND) FRUIT-TREE BEARING FRUIT AFTER ITS KIND, WHEREIN IS THE SEED THEREOF, UPON THE EARTH: AND IT WAS SO. AND THE EARTH BROUGHT FORTH GRASS, HERB YIELDING SEED, (AND) FRUIT-TREE BEARING FRUIT, WHEREIN IS THE SEED THEREOF, AFTER ITS KIND; AND GOD SAW THAT IT WAS GOOD."

These words signalize the dawn of *organization in action*. Hitherto there has been organization, but now we come to self-adapting organization, and the mystery of causation can less easily be overlooked. As comprehensively embodied in a single living organism with its adaptations constantly proceeding before our very eyes, an

ordering and regulating cause is pressed more obtrusively upon us than it is in the immense order of the universe, where all that can be observed is but as a particle, and our whole vigil is but as a moment.

Ignoring the significance of organization, we come to an insoluble difficulty at the point of transition from organized structure to a vital organism, and this is at present one of the most effectual checks upon the absolutism of any general theory of simple progressive development.

The statements in the narrative concerning both parts of this third portion of the work are distinguished by the omission of any reference to the activity of God in performing His will such as occurs elsewhere.

We read that God *created* the heaven and the earth; that the Spirit of God *moved* upon the face of the waters before it was said, let there be light; that God *made* the firmament of which He had spoken: but there is no intimation of a Divine process in this account of the third portion of the work.

I would venture to suggest that perhaps this

exception is owing, in the first part, to the existence in the preceding work of the *force*, or measure of Divine energy, required for this new development, and in the second part either to the same reason, or to the fact of vital energy being so intimately connected with the Will of God as to exclude the thought of process or to withstand the power of words to express it. This latter alternative has, however, opposed to it the fact that some conjunctures, apparently more fundamental, are indicated by the words create and make.

Thus with great diffidence we are inclined to think that physical science somewhat magnifies the difficulty here at the advent of a living organism by minimizing the prior significant mystery of structural organization. Before the dawn of physical life there was existence and order. If these latter realities always impressed our minds with the testimony they bear to their own spiritual origin, we should not be as startled as we are by the advent of life. But whereas the ever-increasing knowledge of the material universe tends to put the advent of existence and

order farther and farther back, and evades giving any account of it; on the other hand this same knowledge accentuates the necessity of the advent of life, and that within calculable limits of time. The difficulties are of the same kind, but it is possible to ignore the one, and impossible to ignore the other. In saying that physical science seems to magnify the difficulty of accounting for the origin of life, we mean, of course, that it does so relatively by making too little of the other difficulty.

Cf. 2 Pet. iii. 5. According to our narrative, we observe that in this portion of the work there is no creating, moving, or making, but only a fresh direction. It was the Will of God that the earth which had been compacted out of and by means of water should bring forth vegetation. From the cedar to the hyssop, all plant organisms are of the earth; their substance is akin to unvitalized substances about them, they decay down into lifeless mould, which may again be built up into living tissue, yet their bright verdure and lustrous blossoms shed a fresh radiance upon the earth.

The material having been prepared, there at



length appeared the physical basis of vitality, followed by assimilation, growth, and heredity.

Modern science has now for many years been demonstrating the unity of this day of life, teaching us to look upon all vital organisms as related to one another, as actuated by the same principles, and exhibiting, in their endless variety of forms, the same agent, and reflecting the same light. It takes only one day to make a living world out of soil, air, and water.

As we have seen, an acceptation of the word day divested of the notion of time has been secured so that *the day of vegetation* is just a literally true term for the wakening and quickening principle of vegetation.

Thus the activity of every plant depends upon the light or day of organic life. Plants can only do their work while it is day, while this light is in them ; withdraw the vitalizing principle, and then in that night they cannot work.

Before this day, in spite of all the brightness of the world, there still hovered over it the darkness of death. Into this darkness there shot forth a gleam of quickening light, the harbinger of a

third day, continuous with the other two days, and shining by help of them : *Vegetation brightening the desert globe of land and water* is a third day.

“AND GOD SAID, LET THERE BE LIGHTS IN THE FIRMAMENT OF THE HEAVEN TO DIVIDE THE DAY FROM THE NIGHT ; AND LET THEM BE FOR SIGNS AND FOR SEASONS, AND FOR DAYS AND YEARS : AND LET THEM BE FOR LIGHTS IN THE FIRMAMENT OF THE HEAVEN, TO GIVE LIGHT UPON THE EARTH : AND IT WAS SO. AND GOD MADE THE TWO GREAT LIGHTS ; THE GREATER LIGHT TO RULE THE DAY, AND THE LESSER LIGHT TO RULE THE NIGHT : (HE MADE) THE STARS ALSO.”

There are two interesting points of language to be noticed in this statement. The form of

וַיֹּאמֶר אֱלֹהִים יְהִי *expression, and God said there shall be, or let there be, is only used in connection with the first, second, and fourth portions of the work.* And the

וַיֹּאמֶר אֱלֹהִים יְהִי *expansion of this form into And God said let there be—and God made, is used only of the second and fourth portions.*

So that these three portions of the work, the first, second, and fourth, are bound together, as it were, by phraseology. The light-giving substance,

the translucent firmament, and the solar and stellar system, are closely united parts of the whole work; they together compose a great section which culminates in the ordinance that affords signs and seasons, and days and years.

The connection of these three portions of the work is illustrated by the Nebula hypothesis, according to which, if extended to the whole stellar system, as well as to its part, the solar system, the original cloud of fire-dust condensed, threw off from itself rings, somewhat similar perhaps to those now encircling the planet Saturn, which collapsed and assumed the shape of spheroids; thus, and by kindred processes on a smaller scale, the nebulous matter was resolved into stars, planets, and satellites, some of which, but particularly the sun and moon, by the clearing of our atmosphere, became visible as an established order of luminaries, rendering an inestimable and manifold service for the dwellers on this planet.

This scientific theory illustrates the narrative of Genesis, in the first place, by presenting a definite

conception of an early luminous state of the universe before the existence of the familiar luminaries ; secondly, by its conception of a division in the *fluid haze of light*, separating the part beneath the heaven—that is, our earth—from the part above the heaven—that is, the sun, moon and stars—which explains both the fluid condition of the universe, and also the thought of a firmament reaching to the sun, moon, and stars ; thirdly, by being in itself a formulated theory conceived in great part from studying the ordered array of heavenly bodies, it is a sample of the good purpose served by the appearance of the orbs of heaven through the atmosphere of earth. It is easy to imagine how a very slight difference in the laws of light, or in the constitution of the æther, or in the condition of our atmosphere, might have left the earth without a sight of the ordinance of heaven.

Of course, “ laws ” being as they are, the state of things could not be different, which is really nothing wiser than saying the world is as it is ; and this is one of the few things allowed to be self-evident. In the same way a masterpiece of

architecture could not be other than it is, seeing that both bricklayer and stonemason worked so as to produce it. But the credit of the whole, as a piece of architecture, is due to him by whose inspiration both bricklayer and stonemason performed their tasks. So the inestimable service rendered to man by the sun, moon, and stars is owing to laws being as they are, that is to say, it is owing to the principal cause of the universe.

There is no final explanation of the benefits devived from the system of sun, moon, and stars, acting as luminaries to this earth, than this : AND GOD SET OR GAVE THEM IN THE FIRMAMENT OF THE HEAVEN, TO GIVE LIGHT UPON THE EARTH.

If the scientific view be correct, and its relation to this narrative be that which we have adopted, then the formation of sun, moon, and stars had been proceeding by means of the second day, the causative principle of celestial spaces in the uncongealed mass which was the inchoate heaven and earth. And this fourth day is the cause of the special relation of the heavenly bodies towards the sense and intelligence of creatures about to inhabit the earth ; the cause of sun, moon,

and stars fulfilling a certain function for our benefit; the cause of their being able to act as luminaries.

By this fourth day we have the orderly succession of light and darkness, day and night, diminutive portions of those spoken of in the beginning of the narrative; yet truly day so far as it is light, truly night so far as it is darkness. By this fourth day we have the regulative thought of time.

By this fourth day we have learned many things, and been enabled to make such a theory of the universe as that of which we have just been speaking. By this fourth day we have been provided with signs which have been the key of knowledge, with seasons that have enabled us to arrange our work, with days in which to labour, and nights in which to rest.

By this fourth day a dynamic influence has been exerted upon the faculty by which we acquire knowledge. Astrology is not to be judged by the information to which it led so much as by the invaluable exercise it gave to the faculty of observation. This influence is seen in the word

Prof. Skeat. *consider*, which literally means to contemplate the

stars. Professor Tyndall has pointed out that, at first, through sheer want of capacity, the mind refuses to take in revealed facts, but by degrees the steady contemplation of these facts so strengthens and expands the intellectual powers, that where truth once could not find an entrance, it eventually finds a home. So, while we lay aside many of the notions formed by those who have unweariedly watched the hosts of heaven, we are the inheritors of mental powers improved by such contemplation.

By this fourth day there is displayed before man's eyes the stately pageant of an established order with which he cannot intermeddle; which man has not made, and which he cannot destroy. This has enabled man to get above himself by giving him a measure of his own littleness and of God's greatness, and by showing that his own glory, if glory he has, must be in thinking the thoughts of God; by this sign man must be through his spirit superior to all things put together, or he is the merest dust of the balance.

This fourth day is concerned therefore with the setting or *giving* these heavenly bodies in the

"Fragments  
of Science,"  
vol. i., p. 279

Cf. Ps. viii. 3,  
4; lxxii. 5, 7,  
17; lxxiv. 16;  
lxxxix. 36.

firmament, as luminaries to the earth, as, in several senses, a ruling institution in relation to man.

This fourth day of God includes all our days, and, before it closes, all of them must be numbered. The earth itself was once aglow, but when it ceased to be self-luminous, it was probably surrounded by an atmosphere too heavily laden for the passage of light from without, so that it was left in utter darkness. As the air cleared, rays of sunlight struggled through, and thus there was a suffused light in which it is likely plant-life began to flourish, and then the earth was gradually covered with profuse vegetation, which conduced to the further purifying of the atmosphere. The fourth day dawned in the apparition of the defined orbs of the luminaries, a system of manifold enlightenment for a being, now foreshadowed, who should be susceptible of such brightness. This, *like a finer light in light*, is a fourth day.

"In Memoriam,"  
xci. 16.

"AND GOD SAID, LET THE WATERS BRING FORTH ABUNDANTLY THE MOVING CREATURE THAT HATH LIFE, AND LET FOWL FLY ABOVE THE



EARTH IN THE OPEN FIRMAMENT OF HEAVEN.  
AND GOD CREATED THE GREAT WHALES, AND  
EVERY LIVING CREATURE THAT MOVETH, WHICH  
THE WATERS BROUGHT FORTH ABUNDANTLY,  
AFTER THEIR KINDS, AND EVERY WINGED FOWL  
AFTER ITS KIND."

The translation produces a misleading resemblance between this account and that of the earth bringing forth grass. "Let the water bring forth abundantly the moving creature that hath life," יִצְרְעוּ הַמַּיִם יִצְרְעוּ is expressed by the original in five words, *swarm*, נִפְּשׁ חַיָּה, *the-waters*, *swarm*, *breath*, *life*. The word *swarm* occurs twice, first as a verb in the future, secondly as a noun. Such repetition is a common form of emphasis.

In verses 20 and 21, we learn that the waters were to swarm with, and that they did swarm with, living creatures; but we do not learn that the waters generated them, nor that the waters brought forth the living creatures in the same way that the earth brought forth grass.

The two equivocal words fowl and whale are simple examples of that ambiguity of language to which allusion was made in the short Introduction.

Trade and domestic usage have been limiting the word fowl to a certain sort of poultry, whereas it was as comprehensive as the word bird, and more so than the word bird is at the present day. The name whale has been subjected to similar limitations. Its use is now technically confined to "an aquatic mammalian of the order cetacea."

Prof. R. G.  
Latham.

The sense of the word is "roller," from the rolling of porpoises, and is closely allied to "wheel." It was originally applied to any large *fish*, including the walrus, grampus, and porpoise.

Prof. Skeat.

The word translated whales was not even restricted to creatures inhabiting the water, and is the same original for which we read "dragons," and "serpents." The word for fowl means a flying-thing. Thus in both cases the corresponding Hebrew words demand that the full breadth of meaning be restored to their English counterparts.

Deut. xxxii.  
33.

Ex. vii. 12.

Of all changes and conjunctures that we have hitherto met with in the course of the world's formation, this advent of living creatures is the most important. It is the first step in the great

reflex action which becomes perfect in man. The work itself, up to this point, contained neither feeling nor perception. Notwithstanding all earth's brightness, the night of insensibility still hung over it. We may distinguish between the power evinced in originating a solar system and in the growth of a crystal, between simple accretion in a not-living body and complex assimilation in a vital organism; but the transition to the animal senses marks, with far greater distinctness, a new revelation of the Power from whom the world is derived.

The assertions of scientific authorities upon this point are very explicit. Dr. Wallace, the co-discoverer with Darwin of the paramount importance of "natural selection," says that the introduction of sensation is beyond all possibility of explanation by matter, its laws and forces; that we have here the certainty that something new has arisen. Mr. Huxley thinks that anything so remarkable as a state of consciousness coming about as the result of irritating nervous tissue, is just as unaccountable as the appearance of the Djinn when Alladin rubbed his lamp in the

Cf. Bettany  
"Introd. to  
Travels on  
the Amazon,"  
"Darwin-  
ism," p. 474.

Principal  
John Caird,  
"Phil. R.," p.  
111.

Jam. Sully,  
Esq.

story. The passage from the physics of the brain to the corresponding facts of consciousness is, to Professor Tyndall, unthinkable. And the writer of one division of the article "Evolution" in the "Encyclopædia Britannica" bears similar testimony. He says, "all the laws of physical evolution can never help us to understand the first genesis of mind; and this difficulty is in no way reduced by Mr. Spencer's conception of a perfect gradation from purely physical to conscious life. The dawn of the first confused and shapeless feeling is as much a mystery as the genesis of a distinct sensation."

This inscrutable occurrence, which, to science, is a new thing, unaccountable, unthinkable, and a mystery, is distinguished by the use, for the second time only, of the exceptional word create: God CREATED the great whales, and every living creature that moveth.

Not a single one of the senses is physically intelligible. Whatever *animated jelly* first felt even the slightest irritation, or the feeblest quivering of any sensation, was the earnest of a new day, and a token of the most eventful fresh

departure since God created the heaven and the earth. The great whales are the representatives of this new creation, the breath of life, including feeling and perception. The breath of life in this sense of perceptive existence, or as that which translates motion into sensation, is induced by the Divine energy, denoted by the unusual word create. The fifth day is the abiding light of sensitive light.

Although this fresh departure is a new thing, unaccountable, unthinkable, and a mystery, yet it is so obscure in its first beginning as to elude detection. Mr. Wallace, who affirms that the merest rudiment of sensation or self-consciousness <sup>"Natural Selection," p. 372 B.</sup> is infinitely removed from absolutely non-sentient or unconscious matter, says that the transition is <sup>"Darwinism," p. 476.</sup> as absolutely imperceptible at its point of origin as the change that takes place in the curve in which a body is moving when the application of some new force causes the curve to be slightly altered.

The language formed upon the actual making of day from darkness through an obscure passage of evening, supplies a perfectly adequate expression

for progress by the most imperceptible gradations. This language is partially illustrated by the name *cozoon*, meaning *dawn of life*; but the comparative suddenness of dawn with its rapid merging into morning, caused by the rising of a luminary already perfected, disqualifies the common advent of day from forming such an accurate expression for the coming to light of a really new and distinct genesis.

“The first confused and shapeless feeling” is due, not to the rising of an entirely formed luminary, but to the struggling into existence of the light itself; not to an external order, but to a light immanent in that which it illuminates.

Thus the word evening might suggest a name for a class of things in which sensation is very slight, or in which the existence of sensation is doubtful; so *crepuscular* might be used in relation to this intermediate *regnum protisticum* to describe some modification in an organism instead of a mere manner of life.

But, as we have seen, the word evening very easily includes a backward reference to light. By the form of this narrative the common word

has been made to foreshadow the morning of a coming day, but it also familiarly refers to a previous day. Now a day was already bright in the organic life of vegetation, and it is out of this that the new light struggles into existence. "The vegetable," says Professor Tyndall, "shades into the animal by such fine gradations, that it is impossible to say where the one ends and the other begins."

"Fragments  
of Science,"  
vol. II., p. 246.

The lasting day of living things, the inward light of vegetative organisms, had already dawned; but as concerning sight and sense, it was still night. Subsequently there was something associated with this light of crescent or vegetative life which went beyond the effect of its intensest brilliancy; something different in kind from the power evidenced in the peerless products of the vegetable kingdom; something not developed from this light, yet within it, and only within it.

There was an ever-so-slight suffusion of an entirely fresh sort of light somewhere in the path of organic life's rays, a mingling of a new indistinct principle. This was the evening to be followed by the morning of sentient life, a fifth day.

“AND GOD SAID, LET THE EARTH BRING FORTH THE LIVING CREATURE AFTER ITS KIND, CATTLE AND CREEPING THING, AND BEAST OF THE EARTH AFTER ITS KIND; AND IT WAS SO. AND GOD MADE THE BEAST OF THE EARTH AFTER ITS KIND, AND THE CATTLE AFTER THEIR KIND, AND EVERY THING THAT CREEPETH UPON THE GROUND AFTER ITS KIND: AND GOD SAW THAT IT WAS GOOD.”

Darwin,  
“Origin of  
Species,”  
p. 533.

A. R. Wal-  
lace, “Dar-  
winism,”  
p. 409.

Science now supposes that all birds, beasts, and fishes are lineally descended from an ancestral fish, or, at least, a creature fitted for aquatic life.

Assuming the general truth of this hypothesis, an interesting illustration is afforded of the nice distinction in the use of words observed in our narrative.

It was pointed out above that sensitive life was not *brought forth* or derived from anything previously existing.

Although it may have arisen, and probably did arise, within some vegetable organism, within the light of organic life, yet it was not of it, it was not a simple development from it.

Sensitive life was stated on the authority of



science and Scripture to be a new thing in the world distinct from vegetation. The language as to the evening made room for the intimate connection of organic life with sensitive life as its necessary environment or *involucrum*; while the use of the word create, and the avoidance of the word for derivation, accentuated the newness of the gift with which the world was enriched.

If science is correct in this particular, there is no such break between beast and fish as between fish and plant, but rather the interval can be filled up, by the well trained imagination, with a fairly intelligible progressive development.

Corresponding with this scientific belief we have in our narrative, not an absolute *let be*, or *swarm*, or the word create, but simply *let the earth bring forth*. The earth was already endowed with sensitive life and no new thing was wanted for the evolution of cattle, creeping thing, and beast of the earth.

Moreover, how clearly and simply this narrative distinguishes and unites the material and spiritual aspects of evolution: the outward progress and the inward power; the visible and

the invisible. Is one looking for the external facts of the world's history?—if so, it is quite true the earth brought forth the beast of the earth. Is one, with soul unsatisfied, asking why there is a history, and what is the efficient cause of that whole infinite wonder called a living creature?—if so, he is answered: God made the beast of the earth after its kind. As after the *creation* of heaven and earth we read that God *made* the firmament and the sun, moon, and stars, so after the *creation* of breath of life, represented by the great whales, we read that God *made* the beast of the earth.

The order ascending from plants to land animals is an evident advance towards creatures having life more abundantly, finding more in life, more warmth and feeling, a greater variety and intensity of sensation. They are upward steps, which may be generally distinguished by the facts of seeding, spawning, laying eggs, and bearing young.

Although marking progress, these land creatures do not bring in a new day. There is room even to question why they occur here rather than in the previous account of the fifth day, and modern scientific theory is ready with a reply.

The descent of man from animal progenitors or the genealogical connection of man with other members of the animal kingdom appears to be the most explicit hypothesis as to his physical origin. If we may not regard this as the accepted theory, yet, from the favourable reception accorded it by those who are authorities in such matters, we shall be justified in provisionally adopting it.

In this case, verses 24 and 25 introduce the account of the sixth portion of the work, just as verses 9 and 10 introduce the account of the third portion of the work. In both cases there is a reference to the soil or basis for a new vitality. The relation of man to beast is somewhat similar to that between vegetation and the earth. The physical basis of life is to plants what the sensitive basis of life is to men. We have read that God made the creatures which the earth brought forth, and we are about to read of God's making a particular race of creatures.

“AND GOD SAID, LET US MAKE MAN IN OUR IMAGE AFTER OUR LIKENESS: AND LET THEM HAVE DOMINION OVER THE FISH OF THE SEA,

AND OVER THE FOWL OF THE AIR, AND OVER THE CATTLE, AND OVER ALL THE EARTH, AND OVER EVERY CREEPING THING THAT CREEPETH UPON THE EARTH."

"Descent of Man," vol. i., pp. 136, 137.

"Man," says Darwin, "in the rudest state in which he now exists is the most dominant animal that has ever appeared in the earth. He has spread more widely than any other highly organized form; and all others have yielded before him."

"Descent of Man," vol. ii., p. 405.

"Man's Place in Nature," p. 110.

But we cannot stop here. Darwin also speaks of man's *godlike* intellect. Mr. Huxley says that no one is more strongly convinced than he is of the vastness of the gulf between civilized man and the brute, or is more certain that whether *from* them or not, he is assuredly not of them.

"Darwinism," p. 474.

And Mr. Wallace speaks of this advance from animal to man as one of the stages in the development of the organic world, when some new cause or power must necessarily have come into action. There are faculties, he says, which clearly point to the existence in man of something which he has not derived from his animal progenitors and which could not possibly have been developed

Ib., p. 40.

Ib., p. 474.

by means of the same laws which have determined the progressive development of the organic world in general, and also of man's physical organism. He refers to the love of truth, the delight in beauty, the passion for justice, the thrill of exultation with which we hear of any act of courageous self-sacrifice, as the workings within us of a higher nature which has not been developed by means of the struggle for material existence.

Mr. E. B. Tylor says that the opinion is deeply rooted in modern as in ancient thought, that only a distinctively human element of the highest import can account for the severance between man and the highest animal below him.

Art. "Anthropology,"  
in "Ency. Brit."

This godlike higher nature, which places so vast a gulf between civilized man and the brute, that although derived from it he cannot simply be classed with it, is thus accounted for in our narrative: "AND GOD CREATED MAN IN HIS OWN IMAGE, IN THE IMAGE OF GOD CREATED HE HIM; MALE AND FEMALE CREATED HE THEM."

Here for the third and last time we meet with the word create. God created the heaven and the earth, God created the great whales and all

breath of life, and God created man in His own image. The three several orders of the world represented respectively by gravitation, sensation, and reflection, or by body, soul, and spirit, are each ultimately ascribed to the action of God denoted by our chief word *create*.

The image of God in man is evinced by the keen intelligent interest man takes in all God's works, from stones to stars, from merest weeds to oaks and cedars, from a worm to a lion, from material stuff to immaterial spirit; by the similarity of his activity to that spoken of in this chapter and implied in nature; by his concentrated attention to, and his appreciation of, all that we sum up in the word character; by his sense of duty and responsibility and accountability; by the measureless capacity, the undeveloped possibilities, the potentiality of man; by the human desire springing from heart and mind that God would rend the heavens and come down, for, as Prof. Tyndall says, "religious feeling is as much a verity as any other part of human consciousness."

Cf. Is. lxiv. 1

"Fragments of Science," vol. ii., p. 376.

Darwin's "Descent of Man," vol. i., p. 213.

Man, *the wonder and glory of the universe*, ushers in the morning of the sixth day.

Whatever traces of his characteristic endowments may be detected in other animals, it is but the indefinite evening until man arrives. He reflects new light in the world, even "a ray from the infinite source of truth."

It is very interesting to find that Linnæus had thought of the adjectives *diurnus* and *nocturnus*, to distinguish the species *homo* which is man, from the species *homo* which physically resembles man. When *homo nocturnus* or *vespertinus* becomes *homo diurnus*, the work is finished. There is a falling short, until in some sense it can be said, "Ye were Eph. v. 8. once darkness, but are now light in the Lord; ye 1 Thess. v. 5. are all sons of light, and sons of the day."

The Bible account of the sublime transfiguration of man which distinguishes him from the brute creation is interestingly illustrated both as to thought and diction by the following description taken from a scientific point of view: "In comparing civilized man with animals," writes Professor Huxley, "one is as the Alpine traveller, who sees the mountains arising into the sky and can hardly discern *where the deep shadowed crags and roseate peaks end, and where the clouds of heaven*"

"Man's Place in Nature," pp. 111, 112.

*begin*—our reverence for the nobility of manhood will not be lessened by the knowledge that man is, in substance and in structure, one with the brutes; for he alone possesses the marvellous endowment of intelligible and rational speech, whereby, in the secular period of his existence, he has slowly accumulated and organized the experience which is almost wholly lost with the cessation of every individual life in other animals; so that now he stands raised upon it as on a mountain top, far above the level of his humble fellows, and *transfigured from his grosser nature by reflecting, here and there, a ray from the infinite source of truth.*"

The momentous transition from simple animalism to human nature is conspicuously marked by the use, for the third and last time, of the word create. This emphasis is further intensified by the threefold repetition of the word create in this connection, thus giving to the fact so accentuated an unique importance, an importance which is amply vindicated by the climax of this new departure bringing the world into correspondence or communion with God.

Cf. Milton's  
"P. L.," bk.  
vii., line 511,  
"to correspond with  
Heaven."



If with the scientific commentary on the first chapter of Genesis, thus very briefly indicated, we compare the seventh book of Milton's "Paradise Lost" and what is there said on the subject under the name of Raphael the Divine interpreter, I think the advantage will be found unmistakably on the side of the former. The scientific commentary is more expository, it keeps more closely to the text, and is more reverent.

All the words telling of progress and processes are shown to be significant, while it contains nothing to suggest unbecoming thoughts about God; much less such a degrading representation as that in Milton's reference to the Creator, as turning round on one foot and with the other describing the world's circumference.

In dealing with the subject of light the superiority of the scientific interpretation is most clearly seen. It seems somewhat worthily to fill in the grand outline of the text, whereas our great poet is evidently cramped by his view of nature, and is unable to find any meaning for the sun's late origin. In fact, he imagines a

luminary, as substitute, in the place left vacant by the sun's unreasonably postponed advent.

“ (Light) from her native east,  
To journey through the aery gloom began,  
Spher'd in a radiant cloud, for yet the sun  
Was not; she in a cloudy tabernacle  
Sojourn'd the while.”

Then

“ A mighty sphere he fram'd, unlightsome first,”

And

“ Of light by far the greater part he took,  
Transplanted from her cloudy shrine, and plac'd  
In the sun's orb, made porous to receive,  
And drink the liquid light.”

Milton, with his magnificent gift of imagination, could not eliminate the sun from his thoughts, even when setting himself to picture a state of things before the sun's existence. He must have light in a cloudy tabernacle, journeying from her native east, producing the familiar day and night of time, and accordingly, without the slightest textual justification, rounds off his narrative with a seventh evening forerunning night. Thus *the resolute and persevering search of the scientific worker after nature's secrets* has resulted in a more faithful rendering of this Biblical prologue than that

produced by the immortal genius of Milton. No gem in the ample treasury of the poet's rich and rare imagination has the lustre of those brought to the surface by the invincible patience and ceaseless drilling, picking, and digging, of a small band of scientific miners. Physical science has supplied the conceptions by means of which the luminous language of our narrative can reflect its light.

God called the light day, and the great work grew under the Divine influence by successive rings of light, till the last circle touched the shore of eternal light, and vibrated back to the centre.

“And man appears at last. So far the seal  
Is put on life ; one stage of being complete,  
One scheme wound up : and from the grand result  
A supplementary reflux of light  
Illustrates all the inferior grades, explains  
Each back step in the circle.”

*Browning.*



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### CHAPTER III.

THIS imposing universe, in all its majestic vastness and magnificent variety and richness of detail, has been called the vesture of God ; be it so, He is still wearing it, for it is full of life and movement, and its outlines show the presence of an indwelling mystery.

The grossest matter is only gross because we have not eyes to see the fineness of its texture and the indestructible perfection of its fundamental tracery. The flowers which bloom and die away in the course of a process of growth make visible the glory which does not grow, but which is hidden by the obtuseness of man's sight.

Many distinct processes concurred in the production of this little book : type, leaves, and cover have had a long unwritten history, but at this moment the existence and order of atoms

and molecules, which are now here and which through all that history have remained the same and unchanged, are a mystery which displays the presence of a Divine worker, in the same way that the book in its present form displays the presence of a human worker.

If, gazing at the ordered world, the human mind asserts that this was not always thus, and insists upon getting beyond it, so, when passing beyond all processes of growth and development, the human mind finds that the first particles of matter, like bricks and hewn stones, of which the whole is built, are themselves signs of ordered work, man can see therein their maker.

The material of the world is a present sign. Time has not abated its mystery. That it existed yesterday is no explanation of its existence to-day. Science has not distilled the spirit of order out of it, but has rather displayed more clearly than ever the spirit of order that pervades it. Its Protean transformations have not altered it. The sign of its being a rational result is indelibly stamped upon it. Work and reason shine through it. Notwithstanding a



\* certain sort of familiarity we have with matter, the freshness of its significance is untarnished, for in itself it remains unchanged.

This is an instance where familiarity and ignorance go hand in hand. For investigation into the nature of matter has not simply resulted in its vindication from the charge of grossness, but has set up a strong doubt as to whether our conception of matter is not fundamentally at fault. If the analysis of the material world could be completed, would it lead us to a substantive particle or to a centre of force, to a piece of something or a point of energy? The question is not yet resolved.

To some minds the material world seems the most indubitable reality, and they appear not to reflect that they who receive the impressions and make the deductions are far more real. Every assertion that a man makes about the outer world is based upon his own invisible self, intelligence, and sensation. The authoritative status of his soul is assumed in all man's convictions about the material world. That inner self, by means of which man is positive of anything, is itself more

positive. The strength with which he affirms the character or nature of a stone springs from the strong confidence of his soul.

*Macmillan's  
Magazine,  
vol. xxii.  
1870.*

Mr. Huxley says that it is an indisputable truth that what we call the material world is known to us under the forms of the ideal world, and that, as Descartes tells us, our knowledge of the soul is more intimate and certain than our knowledge of the body.

1b.

The same writer says that matter and force are, so far as we can know, mere names for certain forms of consciousness.

Now, whether force and matter are distinct entities, or one and the same thing, they are not created by their products. The inscrutably intricate loom, and the ethereal warp and woof, by which, and of which, the world has been and still is being woven, are not products of the marvellously wrought fabric, but are its proximate causes.

Phenomena cannot account for the laws or processes of which phenomena are the effects; no development can explain the existence of material and forces which are the life and

substance of development; therefore all that is fundamental in the existing order is a sign of an independent source.

The first chapter of Genesis helps us to read the revelation which the material world contains somewhat in the same way that a good picture helps us to see natural beauties.

The writing and the picture do not, or should not, take the place of nature, their office is to enable us to see that which, although present, is unperceived. They concentrate our attention on certain aspects of the truth of things, and so improve our vision for all that we look at afterwards. Thus, when we read that God created the heaven and the earth, the assertion is not to be received as true simply because it occurs in a book regarded as sacred, but rather it is presented as a truth self-evident when once plainly exhibited. It is to be seen as a neglected truth in nature is seen in a picture, so that when we turn from the statement or from the picture to nature, we may see therein that which the art of writing or painting has pointed out.

Sometimes a semi-intellectual mist obscures

what under normal circumstances would be quite evident. A picture may be perfectly true to nature as a picture, and yet a graduated scale would show not only that everything represented is smaller than the reality, but perhaps that a man is made taller than a tree, and a house larger than a mountain, while nearly all the angles are different from the measurements in nature. Thus a picture may appear right to the uncritical, wrong to the shallow critic, and right again to the well-cultivated critic.

That God created the heaven and the earth may appear quite self-evident to the uncritical, less self-evident to one who has commenced to think, but self-evident again to one who has thought more deeply.

The intellectual progress of late years has scarcely, if at all, altered the revelation of God in nature. The conception of evolution is no more oblitative than that of growth. Any particular thing may be the result of generation, destruction, and variation, but the molecules of which it is composed "are unalterable by any of the processes which go on in the present state of things, and

"Theory of Heat,"  
J. Clark Maxwell, pp. 311,  
312.

every individual of each species is of exactly the same magnitude, as though they had all been cast in the same mould, like bullets. The individuals of each species also agree in the nature of the light which they emit . . . . that is, in their natural periods of vibration. They are, therefore, like tuning-forks all tuned to concert pitch, or like watches regulated to solar time." The writer just quoted goes on to state his belief that the molecules are the only material things which still remain in the precise condition in which they first began to exist, and he asks why we should not look to them for some indication of that spirit of order, "our scientific confidence in which is never shaken by the difficulty which we experience in tracing it in the complex arrangements of visible things, and of which our moral estimation is shown in all our attempts to think and speak the truth, and to ascertain the exact principles of distributive justice."

Thus whereas the uneducated sees God through flowers and fruit, the educated sees Him through the seed which produces them; while the one spells out the name of God in the larger type of

the starry heavens, the other reads of Him in the closer print of molecules and atoms.

As, however, it is with light and seeing, some being unable to see because the faculty of sight is wanting, and others being unable to see because of obstacles in the path of the light's rays, so it is here, all do not see alike, and some seem to be blind. Occasionally help may come from without to remove a cataract from the eye or to draw aside a curtain that impedes the light, but no argument to prove that a man ought to see is of any avail against blindness, and a man who sees needs no argument to prove that which is self-evident.

Moreover, it does not necessarily follow that a man's faculties are in a state of harmonious and proportionate development. On the contrary, it would almost appear to be the rule that one faculty is cultivated at the expense of another, so that the individual whose assertions are decisive in one field of human interest may elsewhere be destitute of authority. The inestimable contributions of Charles Darwin to modern science are consecrated by an awful

sacrifice. He himself acknowledged it to be an accursed evil for a man to become so absorbed in any subject as he was in his. He believed that the parts of the brain upon which the higher tastes depend had in him become atrophied, and that his mind had become "a kind of machine for grinding general laws out of large collections of facts."

*Life and Letters*, vol. ii. p. 139, vol. i. pp. 101, 102.

It is no disparagement, therefore, to the worth of what a man has accomplished, or to his capacity for instructing others upon a subject with which he has made himself thoroughly conversant, if his utterances upon things in general are canvassed like those of ordinary men, and his opinions upon matters which he has voluntarily, or involuntarily, removed far from him are met with a not ill-natured smile. "It is not given to the human intellect to expand itself widely in all directions at once, and to be at the same time gigantic and well proportioned."

*Macaulay.*

The world discloses its Maker as clearly in its first details, to those who can conceive them, as it does, in its state of development, to those who can only decipher a meaning from large letters. Both

for ignorant and learned the light is of the same nature. The material world, however it is looked at, whether by the naked eye, or through microscope or telescope, whether with little or large imagination, bears the impress of being an effect; and if we are so constituted as to be impelled to inquire after the cause, then, that God created the heaven and the earth, is still the only answer.

In a similar way, the assertion that the Spirit of God *moved* before there was light points to the revelation which the existence of force makes in the universe. Whatever be the conception we have to form of matter, we must carefully distinguish all we can see and handle, or at least mentally *visualize*, that is, picture to our minds, as we do a molecule or an atom which is too small for actual vision, from that which, under the names of attraction, force, energy, &c., we represent to ourselves as possessing matter and giving rise to a state of unrest, and so causing phenomena.

Neither as distinct from nor as associated with matter can we possibly picture force which deals with visible things as its property.



Mr. Alfred Wallace, writing of certain clear intimations of a world of spirit to which the world of matter is altogether subordinate, says that to this spiritual world we may refer the marvellously complex forces which we know as gravitation, cohesion, chemical force, radiant force, and electricity, without which the material universe could not exist for a moment in its present form, and perhaps not at all, since without these forces, and perhaps others which may be termed atomic, it is doubtful whether matter itself could have any existence.

Although the words force, law, properties, and such like, are unavoidable in treating of natural phenomena, it is necessary to keep in mind the fact that in using them we encroach upon another region not belonging to phenomena.

We must not suffer the limitations of language to confine our views of the fulness of life and thought. A saying and its meaning are not exact counterparts of one another. The significance of a set of words depends directly upon the methods and notions of the person addressed. Literalness is never more than a matter of degree.

"Darwinism," p. 476.

Signs, letters, phrases, stories (even false ones) may be the elements from which a new expression has to be formed.

We shall do well to attend carefully to the following remarks of Professor Huxley on the subject:

"On the Physical Basis of Life," quoted in Carpenter's "Mind and Science of Energy," *Brit. Quart.*, pp. 58, 59, vol. 59. 1874.

"In itself it is of little moment whether we express the phenomena of matter in terms of spirit, or the phenomena of spirit in terms of matter. Matter may be regarded as a form of thought; thought may be regarded as a property of matter. Each statement has a certain relative truth . . . . If we find that the ascertainment of the order of nature is facilitated by using one terminology, or one set of symbols, rather than another, it is our clear duty to use the former, and no harm can accrue so long as we bear in mind that *we are dealing merely with terms and symbols.*"

Thus when our task is not to ascertain the *order* of nature, but rather its cause and significance; when we are regarding it from the point of view where the phenomena of matter are seen to be exponential of the spiritual world, we must bear in mind that the customary language, including such words as force, law, properties, has been only

relatively true; true, that is, to the one-sided view, which is all we can adequately study at a time. And we must be on our guard lest the mere terms and symbols of an absorbingly interesting pursuit acquire an absolute value, and tyrannize over all our conceptions.

We employ the word *force*, and almost of necessity co-ordinate with it pronouns in the neuter gender. But it is nothing more than a symbol for the Invisible, who or which conditions the visible. Of course, if this force is thought of as a *thing*, such as a steel or elastic spring, or as material steam, we are still dealing only with a symbol, which must be as carefully distinguished from that symbolized by it as a name is distinguished from a person. The great danger is lest words and imagination be so misused as to project an image of the visible world upon the place of the invisible, and the ocean be forgotten in looking at a reflection of the island.

The phrases "inherent forces," "self-existing laws," "self-contained energy," are dangerous, because, being like very large vessels for comparatively small quantities, they are specially

liable to mislead. They contain unnecessary dogmatic assumptions, which, however, as a rule, have no bearing upon the subject in the treatment of which they are used. So they may generally answer their purpose just as a true or false assertion or a large or small number might take the place of the symbol  $x$  in an algebraical problem, and, although a clumsy substitute, would not prevent the working out of a solution.

The epithets "inherent," "self-existing," "self-contained," seem used to prevent us from looking beyond. When, however, our scientific procedure along a course of sequences is barred, surely it is unwise to establish a self-denying ordinance, and forbid to sight what is denied to a limited intellectual method. *Nicely balanced forces* are as significant as a nicely adjusted machine. When we have worked our way back, step by step, to the most elementary *forms* of force, we have only attained a conventional starting-point. From this spot begins the scientific race, a race that is very long and eventful and absorbing, and marvellous and honourable and glorious; but the course of it is but a track in the arena of human

interest. The life of the humblest human being is beyond it in every direction.

To one person a locomotive engine is a single wonderful contrivance, to another it is a wonderful complexity of contrivances. The one knows very little about it, the other knows all that there is to be known; but each is equally sure that it is the effect of mental and manual effort, although at that personal goal where each has arrived the track of physical science is out of sight.

When we read in scientific treatises that in the consideration of any sequence we can get no further, the meaning is that we are at the end of the tether of a particular intellectual method of knowledge. But just as when we can walk no more we can still hear and see, so we can use other means of knowledge when one has been exhausted.

The energy possessed by animals is scientifically traced back to vegetation. The energy possessed by the vegetable kingdom is traced back to the sun, and the energy of the sun is that of *simple* motion. "When we have acquired the notion of matter in motion, and know what is meant by the

"Theory of  
Heat," p. 281.

energy of that motion, we are unable to conceive," says Clerk Maxwell, "that any possible addition to our knowledge could explain the energy of motion or give us a more perfect knowledge of it than we have already."

Tyndall,  
"Fragments  
of Science,"  
vol. ii., p. 52.

Who or what made the sun, and gave his rays their alleged power? Who or what made and bestowed upon the ultimate particles of matter their wondrous power of varied interaction? Science does not know; the mystery, though pushed back, remains unaltered. These are questions of Professor Tyndall and his answers. "Of the inner quality that enables matter to attract matter," says the same writer, "we know nothing."

In what sense is such motion *simple*, except in the sense that a seed is simple? It contains the same mystery in this seeming naked simplicity as when clothed in one of its numberless forms, and it contains, too, the mystery of its manifold transformations.

Whether, therefore, we look at matter and movement in the fulness and variety of their development, or in the compactness of a primitive

molecule and simple motion, the vision they give of their Maker is very much the same. Creation by God and movement by God are in both cases alike the only ways of accounting for the universe.

Equally from either standpoint, *the invisible* Rom. i. 20. *things of Him since the creation of the world are clearly seen, being perceived through the things that are made.*

The tiniest speck of dust, the smallest sporule or seed, the frailest insect, by the fact of existence, by vitality, by sensation, clearly and unmistakably betoken a mystery which no form of thought, moulded on conceptions of length, breadth, and thickness, can possibly penetrate.

*What is seen hath not been made out of things* Heb. xi. 3. *which appear.*

The fancy that some apparently small thing might "just happen," or occur "by accident," however natural in a world full of unaccountable events, is fraught with an insidious disorder which is fatal to thought. How insignificant is a speck of dust! How trifling is its breaking in twain! How unworthy of mention is the simple

movement of the two particles, whether of approach or recess! What a matter of course is the offspring of any particular sporule or seed, and how natural that there should be some slight variations! Yes, but such fancies are not the fruit of thought, rather they are a withering blight which is the bane of thought. "Happening," and "accident," and often even "nature," are amongst the number of those dubious words that have a disastrous propensity for stifling thought.

Wanting clear-sightedness, men can fancy the universe to be only a large machine, which, as it is going, will continue to go so long as it is left alone; not considering that the *going* of their analogous human contrivances depend altogether upon the physically unknowable. It is quite true man can leave alone the machine he has made, but he leaves it to be maintained and worked by a higher power: by that displayed in gravitation, cohesion, expansion, condensation, and the varied interaction of numberless forces: he leaves it to the regular working and co-ordinating activity of the power behind the visible world.



Man attaches his little curriele to the chariot of nature, and, travelling safely with empty shafts, he sees no need for steeds or charioteer to move and guide the vehicle that towers above his head and carries him along.

This tyranny of sensuousness must be broken by attention to the inner affirmation that there must be a cause, if not a reason, for the least appreciable thing that comes to pass. And in the effects we may see the character of the cause.

Dr. W. B. Carpenter, in his address before the <sup>Brighton, 1872.</sup> British Association (1872), spoke of man's recognition of the unity of the power of which nature's phenomena are the diversified manifestations as the culminating point in man's intellectual interpretation of nature. "The convertibility of the physical forces, the correlation of these with the vital, and the intimacy of that *nexus* between mental and bodily activity . . . which cannot be denied, all lead," he said, "upwards towards one and the same conclusion; and the pyramid of which that philosophical conclusion is the apex *has its foundation in the primitive instincts of humanity.*" An instinctive

belief in this unity is at the basis of that intellectual search which leads to a philosophical belief in this unity. With respect, therefore, to the main conclusion, cultivated and uncultivated are in much the same position. But there is a class of people greatly to be pitied. Those, that is, who possessing little knowledge, are so over-awed by the body of knowledge, which they think others possess, that they are afraid to give credit to their natural instincts, and feel compelled to commit the best treasures of life to the keeping of the pitiless flood of fluctuating and contentious opinion. But how does the matter stand? Starting with sight, and, by its means, we examine the eye, we pass by way of the cornea, aqueous humour, crystalline lens, vitreous humour, to the retina, upon which images are formed. Moreover, "when light falls on the retina, changes are there induced which stimulate the optic nerve-fibres, and these fibres carry impressions through the optic tracts to the corpora quadrigemina. *What then occurs is matter of conjecture?*" Now, this scientific excursion, in spite of the minutest examination of everything

*en route*, makes vision no clearer, and leaves the great mystery of sight as great a mystery still; if it were a significant mystery before we started, it is no less a significant mystery when we arrive home again. *We see* : This fact we start from, then we travel from one thing to another, till we arrive at the last nerve or fibre we can reach, from which we have to take the unavoidable leap, to the fact that, somehow or another, *we see*.

I trust this little book bears me witness that I am not so insensate as to disregard or undervalue the progress of the physical sciences, but I do feel it necessary to point out that the generality of men and women are under no obligation to live, with regard to their common sense, and five senses, and their best gifts and noblest aspirations, in an intolerable bondage to the few *savants* who happen to be the intellectual luminaries of their particular generation. Let us see that the chief facts and their significance are immovable, then give all honour to the untiring zeal and ceaseless toil which have advanced the education of mankind, and explained and ameliorated many of the conditions of human life.

Man is a type of the world, and possesses his own invisible nature as a faculty for realizing the "Power that moves all things." Man's body, like the outward world, is visible and palpable; its structure has been the subject of diligent scrutiny, its functions have been laboriously investigated; but after every interstice has been scrupulously examined, and every labyrinthine intricacy dexterously traced, the investigator and explorer is nowhere to be found.

The following up of human faculties to their source in the brain, the allocation of certain powers to certain portions of grey matter, even if each particular sense could be tracked home to a definite set of molecules, does not narrow the gulf between seen and unseen, between that which can be and that which cannot be mentally visualized, or represented to the mind as having size and shape.

Ever since man has recognized sense and feeling as localized in his own bodily organism, the intimate correspondence between his seen and unseen self has been perfectly obvious, and it would only be knowledge of a kind that has all

along been in his possession, if it were possible to touch with the point of a needle the particle of brain which is the very centre of any particular element of human life.

The facts of sight, hearing, and touch, as well as of thought, consciousness, and will, are left over as an unfathomable mystery. They issue from the unseen, from the utterly unpicturable, from the world that cannot even in imagination be made an object of sight. That which sees can be seen by no mortal eye, that which hears cannot be heard, nor can that which feels be felt.

This invisible self of man is the one available means for realizing the character and nature of the invisible power manifested in the world about us. Man is the key of knowledge to the mystery of the universe. No *thing* will unlock it; no intellectual formula can force it open. Man himself must enter the wards. Neither physical nor mental effort will open it with anything else.

Surely it is an astonishing oversight that a man should be earnestly seeking to find some means of realizing what the force is which he sees manifested in thousands of forms around him, and yet

neglects the force which sets him to work at the problem. While man stands aloof in working at the problem which the world presents, and omits himself, except that visible and mechanical part of himself which is outside the whole personal force through which he faces the problem, he omits the chief fact in the *data* for determining the problem, and ignores the one known essence of activity that bears the slightest resemblance to the soul evidenced in the universe. I pick up a stone ; the action affords full scope for illustrating certain branches of physiology, anatomy, and mechanics, but these sciences do not attempt to give a complete account of the action. I cannot be ignored and I cannot be explained ; so when I let go of the stone, and it falls to the ground, there is a similar incompleteness in the scientific explanation, and the only way of completing it is by bringing in another I, not myself. By a *will* it is raised, and that by another *will* it falls, is the only final explanation. In each case alike there is a full measure of intermediary scientific sequences.

Cf. "Origin  
of the Laws  
of Nature,"  
by Sir  
Edmund  
Beckett,  
p. 44.

Physical science deals with the succession of

phenomena. Its indefatigable votaries examine and describe what order is adhered to in the different departments of the universe which they have made the object of their assiduous investigations. They generalize the discovered order into *laws of nature* or uniformities of things, which summarize the manner according to which the investigated events happen. But when in thought we try to pass from imagining sensible particles to the essence that causes cohesion, motion, work, and growth, we have nothing whatever to rely upon unless it is the will of which each is separately conscious. Leaving out the will of man, we advance just so far in understanding the movements in nature as with the same omission we could advance in understanding what would then appear to be the mechanical actions of man. Man's feeble will may well seem an infinitesimal unit to measure the infinite power evidenced in nature. But although no multiple that we can imagine could raise the will of man to an equality with the force displayed in the universe, yet it alone of all that we can think of appears to be of the same nature.

Man knows of will, wisdom, reason, and love as the mainspring of action and progress. Man can select, can arrange for the production of new forms, can work to obtain perfect specimens, and can adapt things to altered circumstances. Man can specialize, differentiate, co-ordinate, and with thought can utilize for new purposes articles that have become unfit for the offices which they at first fulfilled. The power by which man does all this is invisible, and is not known under an intellectual form. It is personal power. If, however, in watching a man at work, we forgot personal power, he would soon become to us as much a machine as nature appears to be, and we should sum him up as a bundle of thing-like forces.

Cf. Quatre-  
fages' "The  
Human Spe-  
cies," p. 120.

Mr. Wallace believes that the brain, hand, and larynx of savages possess *latent aptitudes* which man has not the power of acquiring for himself, and which, being temporarily useless, cannot be attributed to natural selection. Now, some of our domesticated animals are similarly endowed with characteristics which would never have been acquired if they had been left to themselves. The "portly presence" of the English black horse, the



milk-yielding power of Ayrshire cows, the long, heavy, and bright fleeces of Lincoln sheep, and the early profitable maturity of the Berkshire hog, are due to the interference of man. In man himself there are supposed to be traces of similar intervention, and "Mr. Wallace attributes this intervention, to a *superior intelligence* which acted on the human species, just as the latter has acted on the rock-pigeon to produce from it the pouter or the carrier, and which employed analogous processes."

A writer on natural history says that through <sup>J. G. Wood</sup> M.A. the companionship between man and lower creatures, "it seems very clear that either the higher gives to the lower an intelligence not its own, or that it develops powers which would have lain dormant had they not been called forth by the contact of a superior being."

Man knows of the influence of a higher wisdom upon a lower wisdom, of a higher civilization upon a lower civilization, of the skilful upon the unskilful. A power capable of producing progress and manifesting a progressive tendency is known—it is personal power. The movement

forward is due to a spirit in advance. This personal power is the solitary means of realizing the nature and character of that otherwise "unknown quantity" called force or energy.

Man is conscious of a personal spirit, his own spirit, as a cause of order, achievement, and progress. This consciousness he can use as a key to penetrate within that which is ordered and assimilated, within that which is the visible thing grown, and its material surroundings, to a kindred spirit that orders, makes, and causes progress.

Nature is as a garment woven and worn, and, taking this personal power into account, man draws near to Him who weaves and wears it; but apart from this personal power, nature is but a magic robe devoid of meaning.

Nature is a noun in the objective case, and the governing verb can only be found when man adds reflection to observation. The meanings of such words as force, law, function, tendency, are rooted in the essence of personality as distinguished from the elements of things.

A superficial view of the theory of natural

selection betrays the mind into giving up man's faculty of design as being no clue to the character of the power that underlies natural phenomena. The universe is full of apparently obvious indications of design, but the diligent inquirer discovers that each fact that had been so interpreted merely is as it is, because it happens to succeed. Eyes were not designed to see with, but sight becoming a fact proved to be a safeguard, and those who could see best succeeded best. Thus the organ of sight is what it is through natural selection. All of which is very interesting, and may be perfectly true, but, to be satisfied with it, manifests a want of sagacity. If the eye is not an example of design in itself, it is nevertheless an indication of a marvellously ordered co-ordination of activities which sustain and modify existence, and which include all that is summed up in *laws* of light, sensation, life, and heredity.

Somewhat in the same way, signs of a common ancestry of disconnected tribes or nations are in danger of being disregarded when it is shown to be probable that the same inventions, customs, or myths are due to independent development ; not-

withstanding which, the similarity of development points to a mental uniformity which in turn indicates a common origin.

So do the tendencies and forces of nature indicate a power, between whom and man there is some mental uniformity. Man reflects the light of nature, but he does more, he reflects a light, bright beyond nature, intimations of which appear in this Biblical prologue.

Human nature responds to the relationship which this narrative discloses, both between man and the world, and between man and God.

The activity  
of God.

The world  
not causeless.

This narrative brings into prominent relief the activity of God, and the variety of His activity. He created, His spirit moved, He divided, set, made. Such words are, of course, as inadequate in themselves to represent His activity, as the paint-marks on a picture to represent the fulness of a landscape. Yet they point to that manifold activity, and the symbols become full of meaning as the activity in nature is recognized. Three conceptions of the origin of the universe are put on one side: the causeless, the magical, and the mechanical. God is the cause, but neither a magical nor mechanical cause.

The words of God are shown to be no *abracadabra*, for they are frequently followed by terms expressive of the energy required to fulfil them. The work not magical.

We have to contend not only against the incompetence of language, as moulded on the commonplace, but also against its tendency to mislead, as having been used to embody coarse and baseless notions.

The word create having received a connotation from some crude theory of the origin of the universe, becomes discredited by the confutation of that theory. In reading, that *opinion as to the genesis of man is divided between the theories of the two great schools of biology, that of creation and that of evolution*, we must guard against the assumption that the first chapter of Genesis supports one school to the exclusion of the other, based upon the occurrence there of the word *create*, but not the word *evolution*. "Encl. Brit.," "Anthropology."

Such an assumption overlooks the fact that the word create in Genesis implies no definite method of procedure, that it is used as distinct from the simple command, *Let there be*, that it is only used

of three moments in the whole work, and that it does not occur in the account of the production of organic life: grass and herb and fruit-tree were not *created*.

When the narrative is shown not to be dependent upon cosmical systems demonstratively fallacious, but to be better illustrated by views accredited by closer study and more copious information, yet, it may still demand an effort to forget the fallacy with which the language has been weighted, by the predecessors of our modern scientific men having fathered their theories upon it, by using its vocabulary.

The work not  
mechanical.

Thus there is nothing magical attaching to the sayings of God nor to the word *create*. Neither is there anything mechanical necessarily implied in the assertion that the Spirit of God *moved*, and that God *made*.

רחק The word translated “moved” is used once for an eagle “fluttering” over her young, and once for the “shaking” of the bones of a man who is broken-hearted and overcome. These are the only other cases in which the word occurs throughout the Bible. That which is similarly

Deut. xxxii.  
11.

Jer. xxiii. 9.  
(Kal.)

translated in verses 20 and 21 is a different word.

So the thought of movement is lightly placed on the foundation of this representation of the world's origin, but no more; a word of frequent occurrence and greater precision would assuredly have debased the thought by fixing it down to a conceivable mode of motion. The particular mode being still beyond man's conception, we can only see in the word the supply of that motion which the scientific man discovers to be fundamental and universal.

The word translated "made" is indeed commonly employed for the work of an artificer, but here it is secured against any limitation to a mechanical significance by its use in the text for a tree making fruit, or, as it is naturally rendered, "*bearing fruit.*"

עֲשָׂה

עֵץ פֵּרִי

עוֹשֶׂה פֵּרִי

A definite conception of the mode of God's activity is out of reach, resembling in this the mode of activity of man's personal power. But there is nothing in the words to confine the thought to a fractional part of the energy induced by that activity. And as an inadequate concep-

tion of the method is avoided, so it is noticeable that there is an avoidance of any conception of inadequate means.

The work  
progressive.

That the work is true work is also seen in its progressive results, from light to life, from life to sensation, from sensation to reason and conscience; as in detail, from light mingling with darkness to a separation leading to day, or from fish and birds to beast and man.

Activity con-  
ferring activ-  
ity.

Although the mode and means of this activity are hidden, something of its character is seen. It is an activity which confers activity. Matter is made to give light, the earth to clothe itself in verdure, plants to produce plants, the heavenly bodies to move and fulfil a purpose, living creatures to swarm, fly, creep, and be fruitful; man to subdue the earth and have dominion over the fish, the fowl, and every living thing that moveth upon the earth.

The activity induced is not only activity; not only activity ever becoming more varied and intense, but it is an activity gradually reflecting the quickening, spontaneous, productive, governing, free, creative energy which occasioned it.



Light was followed by the quickening atmosphere; then came the perfectly renewing life, through heredity, of vegetation; then, the ordinance of the heavenly bodies, associating the idea of ruling with the facts of illuminating, regulating, and preparedness to guide and teach; then, the light of feeling, and ever more abundant life, until there was man, whose spirit springs up to the source of life, who could freely resolve to work as God did, when in the beginning He created the heaven and the earth.

Thus we are led to the beneficence of God set forth in this narrative. When mists arise and hide the charms of hill and valley, of peaceful river and free open sea, when the clouds gather and obscure the sun, it is well to have a picture in one's mind of the abiding truth of things; so when man is overtaken by a temporary depression, and his eyes have become dim by poring too long over a detail that can only be understood in its relation to a thousand other details, it is well to have kept before him, as in this narrative, the character of the whole. Is this a blessed world?

The beneficence of God,

Blessedness in creation.

Is it a blessed thing to be alive? Is it true that fish, bird, beast, and man are blessed by being fish, bird, beast, and man? This question has been answered with an angry and most emphatic negative. Life, it has been said, is distinctly not worth living. Men have said so. But why does a man keep the gift and grumble at it, if he thinks that “*he himself might his quietus make with a bare bodkin?*”

Those who take a pessimistic view of human life are very likely to see animal life in the same sombre and gloomy tones. The uncultivated observer concludes that, taken all round, life is distinctly worth having, and he believes that the birds and beasts are happy. When, however, intellectual spectacles are put on, perhaps it seems that happiness is very illogical, and that it ought not, and therefore does not, exist to any appreciable extent. Yet, maybe, when the spectacles are laid aside, and clear intelligent eyesight sees things as they are, there is a full appreciation of the common view. Mr. Alfred Wallace is a man who has come to very close quarters with the actual condition of creaturely existence. Haeckel calls

him one of the boldest and most distinguished scientific travellers of modern times. What is his testimony? "We conclude," he says, "that the popular idea of the struggle for existence entailing misery and pain on the animal world is the very reverse of the truth. What it really brings about is the maximum of life and of enjoyment of life with the minimum of suffering and pain."

The "History of Creation," vol. i. p. 135.

"Darwinism," p. 40.

The question as to the natural blessedness of man is sadly complicated by the misery which he himself has made to be part and parcel of his inheritance and of his lot. "The slings and arrows of outrageous fortune" are mostly from the armoury which man has stored to his own hurt.

"The oppressor's wrong, the proud man's contumely,  
The pangs of despised love, the law's delay;  
The insolence of office, and the spurns  
That patient merit of the unworthy takes,"—

these instruments of torture are derived from the uncontrolled passions of human nature, and conceivably may one day be as obsolete as the rack, thumbscrew, iron-boot, and wheel. The misery of man as contrasted with other animals is due to his being insufficiently human. His true

nature is dominant over the world, but instead of exercising his natural sovereignty to subdue the earth, and rule over all animalism, his own included, this superiority to the animal world has been used in support of his animal passions to create civil war in his own nature, and divide mankind into a host of warring individuals. Most of us have scarcely passed the dim evening state of the progress from mere sensuous existence to the morning of human life; but in the fact that we do, in our heart of hearts, appreciate the light that shines in the noblest characters of universal history; in the fact that we say it was well done when we are told about the deeds of high courage, of patient endeavour, of self-obliterating love, which have been wrought by the saviours of the Race; in the fact that, when we do see human nature in its distinction from animal nature, as in a Newton, a Livingstone, a Wesley, a Coleridge Patteson, a Sarah Martin, a John Howard, a Florence Nightingale, a General Gordon, a Father Damien, and in the true human succession witnessed by the grand array of poets, scientists, artists, scholars, heroes, and saints, we do echo the

“very good” pronounced in this first chapter of Genesis; and in the fact that we recognize in Christ the Dayspring from on high, there is testimony borne within our own nature to a blessedness belonging to us, although we may not yet be basking in the full light of it.

We are glancing at this blessedness, which, both as a possession and as a hope, gilds the universe, in order that we may recognize in nature the truth of our picture, and that we may turn again from our picture and see what is the permanent meaning of nature. Really, to see blessedness in the make of things, we must go beyond anything that we have momentarily realized, and study the presence of the idea of blessedness, and of the search after blessedness, and the sense that blessedness *ought to be*. Were it as seldom possessed and enjoyed as the most miserable philosophers fancy it is, there would remain a witness that blessedness is involved in creation; for there has been manifested or evolved an ecstacy that triumphed over the most untoward outward circumstances, and in expectancy, and maybe in agony, it is testified that the world is in

travail with a blessedness with which it has been quickened. There is a living, though perhaps an unborn blessedness ; and to adopt the language of the narrative with regard to blessedness, much of the world may not have emerged from evening to morning.

This narrative leads us to think of the unity, wisdom, workfulness, and goodness of the Efficient, of whom all nature is the effect.

From a cause which simply makes a thing move, up to the goodness of that cause, is a journey which takes us ever nearer to the cause of man's whole nature, including its capacity and its yearnings. We may not omit man, rather we must specially observe him, when we gaze at the world, to consider the cause of it. I, regarded as inseparable from the whole universe, or, as a distinct personality, am an utterly dependent parcel of existence. It matters not whether my genealogical tree springs from the soil, nor whether millions of types of creatures have passed away and I survive ; there is a cause, an efficient and sufficient cause, of what I am to-day. Our new knowledge has taught us much about

generative processes, but all along man has been aware of a generative process which resulted in his formation. The processes which are in operation about me, and within me, depend upon a cause, and the fact that I am able to take account of them, and see that they are good, demands a cause sufficient for this contemplating and appreciating effect which I am. Whatever may be my independence, or power of origination, as a man, I certainly did not originate either the power of contemplation or of appreciation.

This meditation is made in order that it may not be thought that our picture is untrue to nature. Want of observation often leads to the depreciation of a picture, which, if properly studied, would reward the spectator with a new revelation.

In addition to the references to the works of <sup>The direct words of God,</sup> God, we have our attention drawn in this narrative to the direct words of God. Fourteen times the sayings of God are recorded: as *ordering* light, a firmament, the appearance of dry land, vegetation, the luminaries, living creatures in water and air, beasts of the earth and man; as *giving names* to

light, the firmament, the dry land, and to the collected waters ; *in blessing* the creatures in the sea, and fowls of the air, and man ; and *in assigning* food to man and beast.

What does such language convey to our minds? Would not expressions that referred only to God, as willing or determining and working or fulfilling His will, have conveyed all the truth without the risk of introducing such a difficulty as the thought of God using some particular form of human speech? Was not language capable of representing all that is here represented without the possibility of raising in any mind such a question as "does God speak Hebrew"? I answer at once that it was better He should be conceived of as speaking Hebrew than as not speaking at all. Correspondence is of such vast importance in this world, which includes human development and culture, that a cause in which the ground of this should be absent would be a cause less than its effect.

Let us think out clearly a few thoughts which such language contains.

In the first place, it lays it down most distinctly



that this world was designed. A vibrating elastic medium we call æther gives light, it was meant or designed to give light ; there is a division which makes of the universe a unity of combined distinctions, a whole of many parts ; this dividing firmament partly composed of atmospheric air was designed ; there is dry land, there was meant to be dry land ; there is life, there was meant to be life ; the heavenly bodies act as luminaries, they were meant to act as luminaries ; there are various sensations, such as feeling, seeing, and hearing, these sensations were designed ; there is man, and it was meant that there should be man.

Now all these works may be viewed in a twofold aspect, as things and as parcels of laws : as things they might be planned and made, but as parcels of laws other language will better express the originating of what we find. We frequently speak of natural events happening in obedience to laws. Obedience means to hear or listen to. Thus our common language corresponds exactly with that of the first chapter of Genesis. The countless selective groupings, the various distinctive vibrations, the balance,

The direct words of God are (i.) complementary to our "laws of nature."

co-ordination, and interaction of *forces*, with all the harmony of their incessant movements, and all the order of their inconceivable complexity, are due to obedience.

Thus man's work may often consist in planning and performing, without speaking, because God does the informing. Man fashions a table or builds a house, but all that he employs is obeying Divine behests within its unsearchable recesses.

A law states a rule, but does not designate a force. It partially replies to the question as to how phenomena occur in relation to method; it is absolutely silent as to cause. The question "How?" can often receive correct replies, yet different even in kind. For a particular purpose we frequently look to the time-table to find how the trains run, and ignore the engineer.

Address  
before the  
British Asso-  
ciation, at  
Brighton,  
1872.

"To speak of *any* law," said Dr. W. B. Carpenter, "as 'regulating' or 'governing' phenomena, is only permissible on the assumption that the law is the expression of the *modus operandi* of a governing Power."

Thus the direct commands of God expressed in

this first chapter of Genesis are the necessary complement to the laws of nature of which we read in scientific treatises.

Causation is not ascribed to these sayings; in fact, they are frequently followed by the words which express causation, as where God said, "Let there be a firmament," followed by the statement that God made the firmament. If, therefore, the firmament is presented to us as a thing, then we have learned that God designed and made it; if as a bundle of present multitudinous obediences, we have learned that God gave the word which is implied by those intricately involved but not disconcerted movements of air and æther.

In the second place, it is to be noticed that this direct language ascribes a particular definiteness to certain things in this world. The first chapter of Genesis is full of distinctions which could not have been made by employing a uniformly narrow language that should refer merely to designing and making. God gave names to light, the firmament, the dry land, and the collected waters. The words day and heaven have already received some share of attention, as the meaning attached

The direct words of God (ii.) distinguish the determinate from the indeterminate.

to them in this narrative is very important for its interpretation and for the Biblical vocabulary generally. Here let us notice that this giving of names has distinguished what is comparatively fixed from what is fluctuating and progressive. Light, air, earth, and water are thus contrasted with the organic contents of the world. How sadly it would have clashed with our modern theories to have read that to the lordly cedar, the graceful palm, and clustering vine God gave their names; or even if it had been said that He named the whales which He created. Our picture would have lacked much of its value as a permanent record by thus being out of perspective.

The direct words of God are (iii.) complementary to *instinct*.

In the third place, there is a large group of facts which is dominated by what we call instinct. Disregarding the fundamental distinctions in the world, we may arrive at a notional simplicity, but clear thought will find fixed gulfs, and incommensurable facts, and unconformable plains, and that transmutation is limited, and that the base metals will not be converted into gold. No figurable arrangement of material particles is any more a

measurement for instinct than a two-foot rule is for common sense. This thought, I think, helps us to appreciate the variety of God's activity which our narrative represents. To pick out a single example: the honey-bee is a formation exquisitely fashioned, and is also the embodiment of wonderful instincts; in each aspect it is a token of a present cause, and the thought of a cause that both makes and speaks is one which neither divides the cause nor confounds the distinctive effects. The particular words "make" and "speak" of course suffer from the natural inadequacy of human language, but that is necessarily allowed for at the commencement of such a project as this of putting into human language facts which human thought can only feebly apprehend, and at its best can scarcely hope fully to comprehend. One of the most fundamental of instinctive acts is the appropriation of food, and this corresponds with the definite assignment of food to the animal world: *I have given every green herb for meat.*

The *carnivori* might seem to be disregarded in the appointment of food, but this apparent excep-

Prof. G. G. Stokes, "F.R.S., "Lectures on Light," Third Course, p. 28.

tion is not real. "The food of animals is derived directly or indirectly from vegetables, indirectly in so far as it consists of the flesh of other animals, through which we come down to vegetable feeders at last." The animal world spends the treasure stored by vegetation.

The direct words of God (iv.) show the ground of all correspondence.

In the fourth place, and lastly, this direct speech shows that in the first cause here revealed there is the ground for those correspondences which form the chief blessings of life. The ground is in God Himself. He not only informed creation, but within the first cause there was communication, as is clearly expressed in the 26th verse, where we read that God said, "Let us make man."

Thus we can see that the progress of creation is not ever farther away from God, but towards Him, and ever nearer to Him; it is not like an inverted pyramid, starting from nothing as a base, with infinity for its apex: but commencing with a sufficient cause, creation is ever giving fuller expression to its perfections. The blessings of human correspondences, communion, or friendships, are not groundless; they are not beautiful

effects without a cause, they are founded upon God, who is not the apotheosis of singleness or sameness, nor a thing-like force, nor a deified arithmetical unit, any of which would be inconceivable, as the cause of such a universe as this; but rather He is represented as a unity of combined Distinctions, a Perfect Communion, the ground of all interdependencies and harmonies in the universe, the basis of family life, the source and stay of all love.

This leads us to the thought that God is greater than His work; it does not extend to the illimitable. God is more than creative energy, for we read that He rested on the seventh day.

The word translated "rested" is the root of שבת the word Sabbath. It is used in the statement Joshua v. 12. that the manna *ceased*. On the seventh day God ceased from the activity denoted by creating and making. The word *rested* is negative, but in the assertion God rested on the seventh day, a positive element is introduced by the prepositional part of the sentence. We have previously had occasion to point out that in the 20th chapter of Exodus the prepositional prefix *in* is not used

before the six days, but that it is used here in the 2nd and 3rd verses of the second chapter of Genesis, before the seventh day ; that it is used three times in this connection ; that it is the same prefix which is translated either *on* or *in*. Thus for the character of God's *rest* we must look to the significance of that in which He rested.

We have dwelt at some length upon the declaration that God called the light day, and if we keep this in mind while thinking of the day in which God rested, we shall be set free from such a paralysing thought as that of God's activity ceasing for a time, and our attention can be concentrated upon the character of that light in which God ceases from creating to make.

The light of creation is all from God, but is not the whole light of God. Even here, through the discoveries of scientists, physical light appears more symbolical than ever. Professor Tyndall teaches us that two thirds of the rays emitted by the sun fail to arouse the sense of vision, and that the visible radiation is, as it were, built upon the invisible as its necessary foundation. Physically

"Fragments of Science,"  
vol. ii., p. 89.

Ib., vol. ii.,  
p. 450.  
("The Electric Light").



considered, light and heat are of the same nature.

*Ib.*, vol. ii.  
p. 313; and  
Prof. G. G.  
Stokes,  
"Light as a  
Means of In-  
vestigation,"  
p. 50.

Thus the invisible rays, or (light itself being invisible) the rays at both ends of the spectrum which are emitted continuously with the luminiferous rays of the sun, but fail to excite the sense of vision, are emblematical of the light in which God ceases to illuminate the physical world, to which creation does not extend, <sup>1 Tim. vi. 16.</sup> the light unapproachable.

It was not at the end of a day, as after a tiring period of work, but it was in the seventh day, or light, God brought the work to an end. There is a light of nature, and that light is manifold, but, even so, it does not include all the the light of God. In the Divine nature there are both the daylight of work and the daylight of love, not sequent but co-existent. Nature receives in succession rays which start simultaneously. That in which God ceased had neither night, nor evening, nor morning; it was, is, and will be, day.

This darkness with excess of light stands for that which is beyond the capacity of creation. A dim glance at the particular blessedness of it seems

to be given in that inward communion and fellowship to which reference has been already made, and which further knowledge and experience lead us to regard as the light of love.

Cf. thearists  
and perfects  
in Col. i. 16.

ἐκτίσθη—  
ἔκτισται :

St. John i. 3.

ἐγένετο—

γέγονεν :

and Col. i. 17.

τὰ πάντα

ἐν αὐτῷ

συνέστηκεν.

Cf. Rom. xi.  
36.

Eph. iv. 6.

Thus, whereas the scientist diligently scrutinizes the method of procedure in nature, our narrative speaks in simple language of the present ultimate Occasioner, in whom all things hold together, the Living Force who actuates and animates the whole, of whom and through whom and unto whom are all things, who is over all and through all and in all.

This record of days, of mornings added to mornings, of growing and manifold brilliance verging on the invisible light of God ; this record illustrated by discoveries in physical science, by personal self-knowledge, and by the revelation of Jesus Christ—presents us with the thought of an all-sufficient Cause of the world, including man and his relationships, intelligence, affection, and aspirations ; it offers to the acceptance of our reason, heart, and conscience, the One Light at once, from whom nature receives various rays as in a spectrum, the One Source of energy, intelligence, and love.

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## CHAPTER IV.

ONE of the most fundamental facts in this record is the representation of man as in the image of God, and it is extremely interesting to notice how it has escaped the error which seems to await such a task, that of representing instead, God in the image of man.

Some one has said that if an ox could think of God, it would picture Him as an ox, as a man pictures Him as a man ; very possibly it would do so. Such a thought points to the difficulty of avoiding a portraiture of man to do duty for the presence of God. But here God is represented neither on the one hand as a mere abstraction, nor on the other hand with a single physical feature. He is the source of existence, the origin of various powers, the central fulness of life and community of life, and yet there is a remarkable absence of the merely magnifying

of human methods. In human life, amidst human limitations, there is presented a phase of that which in God is absolute. In fact, the remarkable thing is just the absence of Milton's golden compasses. Boundlessness is to man a negative conception. God called the light day, but man finds it hard to hold to that definition even in this narrative; to him limitations are as necessary to the idea of day as is light itself, and man is related to God as man's idea of day is related to light.

"Paradise  
Lost," vii.,  
225.

Grant Allen.  
Prof. W. H.  
Flower.

When we look beyond history and tradition for the first traces of man's existence, we find them to be of a kind peculiar to the human species, and such as pre-eminently distinguish it from all other living beings. Man is discovered by his works and tools.

"Natural  
Selection,"  
p. 325.

"At length," writes Mr. Wallace, "there came into existence a being in whom that subtle force we term *mind* became of greater importance than his mere bodily structure. Though with a naked and unprotected body, *this* gave him clothing against the varying inclemencies of the seasons. Though unable to compete with the deer in swift-

ness, or with the wild bull in strength, *this* gave him weapons with which to capture or overcome both. Though less capable than most other animals of living on the herbs and fruit that unaided nature supplies, this wonderful faculty taught him to govern and direct nature to his own benefit, and make her produce food for him, when and where he pleased. From the moment when the first skin was used as a covering, when the first rude spear was formed to assist in the chase, when fire was first used to cook his food, when the first seed was sown or shoot planted, a grand revolution was effected in nature, a revolution which in all the previous ages of the earth's history had had no parallel; for a being had arisen who was no longer necessarily subject to change, with the changing universe—a being who was in some degree superior to nature, inasmuch as he knew how to control and regulate her action, and could keep himself in harmony with her, not by a change in body, but by an advance of mind.”

There must be a wide difference both between the cause and the process, and between the process and the consequence. The *consequence* is man :

Man, as we know him, is the latest stage in a certain series of structural changes, which we call the *process*; but these structural changes depend upon the *cause* of existence, of structure, and of change. Because there is more in man than in anything else in the world, therefore more of the cause is seen in him. Man looks below to trace the course of his ascent, but he must lift up his head to find the cause; he stoops to discover his starting-point, but he stands erect, and seeks the heavens for the power which has raised him; the stream springs from the soil at one's feet, but the fountain of living waters is high up the eternal hills; energy is from above, though it operates through that which is beneath.

cf. "Life of  
F. D. Mau-  
rice," vol. ii.,  
p. 277.

In man as man animal life is transfigured. Man is not an animal *plus* a spirit which remains apart from and unconnected with his animal nature, but the new light adds a lustre to that already existing. As the vitality of a plant is intimately connected with that which it imbibes from the earth, air, and water, so that a plant or vegetable organism is glorified matter, similarly the life of a sentient animal is intimately connected with its



body, which is an organism glorified by the senses ; so likewise the spirit of man is intimately connected with his animal nature, so that body and soul and spirit are one man, an animal transfigured in the image of God.

Man's dealing with each of the six days differs widely from that of any other living creature. In contradistinction to everything else, he shows himself to be the child rather than the mere production of nature. By the meagrest beginnings of art and science seen in the infancy both of the individual and of the race, man enters, as it were, nature's workshop and kindles for himself a fire, moulds the earth after his own ideas, and with nature's tools makes his little vegetable kingdom of cultivated plants.

Man producing light by the friction of two sticks imitates, if unconsciously, nature's work in her glowing meteoric nebulae. Man with hand or wheel fashioning bowl or cup, imitates the pottery of nature in her suns, moons, and stars. Man's cereals and garden fruits and flowers manifest his resemblance to Him who has clothed the world in its rich and radiant verdancy.

Human interferences with the things of nature quite beyond any animal needs seem almost to suggest the meddlesomeness of a child which seeks amusement amidst things belonging to grown-up people. Man finds quite a fascinating employment in such things as the artificial formation of light, air, and water; the making the solid into liquid, the liquid into gaseous, the gaseous into solid, and generally in finding out and, if possible, copying the methods of nature.

Moreover, in the profound abyss of heaven, altogether outside the minute sphere of his handiwork, man by mental effort makes the mighty constellations minister to him. The heavens are telling a wonderfully interesting story, but man alone can hear it. The listeners have heard to better purpose in these latter days; but in the ages long ago our primitive ancestors looked above them and learned signs and seasons. "By the help of the stars the shepherd, during the night, could count the hours, the traveller track his course through the uniform wastes of the desert, and the mariner guide his bark over the ocean; the husbandman, also, learned to regulate his labours

"Ency. Brit.,"  
Art. "Astronomy," R.A.  
Proctor.

by the appearance of certain constellations, which gave him warning of the approaching seasons."

And further, just as there are cultivated, or, as we may say, man-made plants, so there are domestic or man-made animals. Not only does man use dogs, sheep, and horses; but, working with nature, he produces the particular sort of dog, sheep, or horse that he desires, and which never existed till he was the means of making it. The domestic breeds of birds and beasts are the effect of a conscious or unconscious childlike imaging of nature by man.

In this moulding each of the six works to a fuller day, or at least a day specialized and adapted to his developing needs, man demonstrates his kinship with the spirit of the universe.

Man endeavours to place his mind beside the worker as distinct from the work. The knowledge of what is, does not satisfy man, he is impelled to ask, how is it? and why is it?

"To explain the origin of the world in which we live, that of beings surrounding us, and our own, is evidently one of the most general aspirations of the human mind. The most civilized nations, as

*Quatrefages'*  
*"The Human*  
*Species."*

well as the most savage tribes, have satisfied this want in one way or another. Even Australians, whatever may have been said to the contrary, have their rudimentary cosmogony, which those who have taken some interest in the matter have made them relate."

"The outward facts of nature," writes Prof. Tyndall, "are insufficient to satisfy the mind. We cannot be content with knowing that the light and heat of the sun illuminate and warm the world. We are led irresistibly to inquire, 'What is light, and what is heat?' and this question leads us at once out of the region of sense into that of imagination."

Independently of scientific conclusions at which men may arrive, we have this irresistible leading out of the region of sense, this primary impulse, this prophetic searching, this human asking with the confidence of there being an answer which man can understand; we have this grand venture of the spirit of man as a sign of his relationship with the universal spirit of wisdom and work. Man's spirit affirms that there is reason at the heart of things, and such reason as is akin to his

own reason. A new point of light glows for a while amongst a myriad scattered stars. "I don't understand it," says an astronomer, "but I can"; and shortly there appears the account of a world that was consumed, and its distance in millions of miles, and the number of years that must have elapsed since its place knew it no more, before the catastrophe could be witnessed from the earth.

"All the apparently irregular motions of the Lockyer heavenly bodies have been reduced to law and order by Newton, who showed that all the motions were really regular, and therefore could be calculated beforehand."

"Newton pondered all these things. He Prof. Tyndall, "Fragments of Science," vol. ii., p. 26. looked, as was his wont, into the darkness until it became entirely luminous. How this light arises we cannot explain, but as a matter of fact it does arise."

Surely the irresistible looking with which man peers into nature, and this inexplicable light with which he is rewarded, are, separately and in their correspondence, significant of a close connection between the human mind and the spirit who

originates and supports all things. But whatever we might argue as to their significance, if we were left alone to draw our own conclusions, here on the one hand are the facts, and on the other hand there is this Biblical explanation, that man is created in the image of God, who is light, who said, *Let there be light*, and there was light, who called the light day, and who added day to day until He manifested Himself in man. Here, I say, are certain facts, and a Biblical explanation ; and just as a man decides as to a concord of sounds quite apart from mechanical measurements or a theory of music, so let him decide here whether his relationship to God is not the one satisfactory explanation of his manhood as he finds it.

Newton exemplified man's belief in and love of order. He showed that not only did he from analogy believe there was a regular system, but also that his spirit was unsatisfied until he could recognize it. He must see it.

Man's attitude with regard to the universe is that of a worker towards a piece of work.

Man's spirit to work transcends the needs of

his grosser nature. Other creatures work with an end in view, but man works with infinity in front of him; they seem to be at home and at rest while he is on pilgrimage. He works not only for an object, but because it is his nature to work. Thus wrote Budgell in the *Spectator*: No. 116.

"Those who have searched into human nature observe that nothing so much shows the nobleness of the soul, as that its felicity consists in action. Every man has such an active principle in him, that he will find out something to employ himself upon, in whatever place or state of life he is posted"; and the following from Carlyle bears <sup>"Sartor Resartus."</sup>

like testimony: "In all the sports of children, were it only in their wanton breakages and defacements, you shall discern a creative instinct; the manikin feels that he is a born man, that his vocation is to work. The choicest present you <sup>"Past and Present,"</sup> can make him is a tool." Again, "Labour is <sup>p. 170.</sup> life; from the inmost heart of the worker rises his God-given force, the sacred celestial life-essence breathed into him by Almighty God; from his inmost heart awakens him to all nobleness—to all <sup>Ib. 173.</sup> knowledge, 'self-knowledge,' and much else, as

soon as work fitly begins." And again, "All true work is sacred ; in all true work, were it but true hand-labour, there is something of Divineness. Labour, wide as the earth, has its summit in heaven. Sweat of the brow ; and up from that to sweat of the brain, sweat of the heart ; which includes all Kepler calculations, Newton meditations, all science, all spoken epics, all acted heroisms, martyrdoms,—up to that 'agony of bloody sweat' which all men have called Divine! O brother, if this is not 'worship,' then I say, the more the pity for worship ; for this is the noblest thing yet discovered under God's sky." The same writer speaks of "Giant Labour" as "the truest emblem there is of God the World-worker, Demiurgus, and Eternal Maker." Consider these assertions of scientist and philosopher, and the light that is thrown upon them by this first chapter of Genesis, with its representation of God as the Great Absolute Worker and of man as made in His image.

Look at the multiform energy of man attested by his works, by his progress, by his fixed determination to progress ; look at that almost



creative energy with which man opens up new fields of labour, that insatiable spirit which no attainments can satisfy, that ceaseless stretching forward towards a goal which he is forever placing well in advance of his present achievements : This being called man who is *always becoming* rather than *come*, whose measure includes a defiance of limits—brings us in sight, if anything can, of the life to which the worlds and all that is therein bear witness, displays the emblem of the Power that moves all things, and by his measureless capacity proclaims himself a child of the Infinite.

“There is in the human intellect,” says Professor Tyndall, “a power of expansion—I might almost call it a power of creation—which is brought into play by the simple brooding upon facts.” At any rate, by literature, (as in the drama), by sciences, arts, professions, and other departments of labour, man has made worlds organized and systematized, and, in part, he lives in them.

The marking progress, by the development of the work, and not by the extraneous and irrelevant notion of time, appeals to the spirit of

the man who endeavours *to make time*, who turns a deaf ear to the brutish cravings for compliance with seasons, and regards the necessary attention to the wants of his animal nature as a restraint upon his spirit. The free labourer working at that in which he takes delight is very intent upon it ; he has a plan, and the rough material ; in his mind there is the thing he means to realize. The stages reached in the course of embodying his idea are the units by which he calculates progress. He works to get light on his subject, to bring it out of the darkness which envelops it, and make his thought as clear as daylight.

When a man voluntarily sets himself to work, then he is no mere machine, without interest in what it accomplishes, no slave for whom time was made, anxiously watching the slowly-moving hands on the dial, or sighing for the setting sun to release him from drudgery ; but he measures his work by the progress of his work, by how much clearer his idea has become. The light he watches is the growing light in his plan, the coming into position and order of its various parts, the development of his subject, the grow-

ing daylight which places facts and arguments in their relative positions; the dawning towards which he presses is one that shall arise in his mind, or in the expression of his thought, in words, or in a picture, or a statue, or a mechanical contrivance, or perhaps some article for use or ornament, or, better still, a noble deed. It is the getting nearer his object that measures his progress. In such a spirit man works towards light, and the mingled state of obscurity, or *evening*, is prophetic of morning. Such a worker, whether in the study, or at the bench, before the easel, or in the laboratory, can understand the order, night to evening, evening to morning, which is the beginning of a lasting day.

We will now turn to another remarkable indication of the peculiar position which man occupies in this world. It is a sign at once of his distinction from the rest of creation and of his kinship with the Creator. That the universe is governed according to law is being ever more and more clearly demonstrated, and is the first article in the creed of science, but when in our survey of all things we arrive at man we find a lawgiver.

Man the Law-giver.

His laws are often worse than questionable, they fall very far short of doing unqualified honour to humanity; but this making laws is full of significance.

The necessity and the possibility of a race of creatures formulating, obeying, and enforcing laws, as it were, on its own account, marks out mankind as a wonderfully distinct thing in the world. The Roman Empire is the great historical expression of the human faculty for government according to law. Every ruler and every subject of that Empire might have been dissected, as the world is dissected, without there being any nearer approach to the source of that strength which secured the stability of the political world. Here in the mind of man we find the one solitary force which bears any sort of resemblance to that which is evidenced in the whole and every part of the material world.

Whether we look to nations or smaller communities, or to individuals, we have this government according to law established by the human will. If a business man could be watched as physical phenomena are watched, a striking

resemblance would be seen in the fact of regularity ; in all examples the cause remains unseen, but in the case of a man we are conscious of the causative principle. I can make a law, and I can keep it ; I can determine to walk four miles an hour, and do so ; I can make up my mind which way I will go, and go in that direction. If a man choose he can act with the regularity of a machine. Now, as soon as we leave what is visible in a machine, we are at a loss to explain its regularity ; we cannot think far enough into it, we necessarily stop short at laws of gravity, of attraction, of heat, &c. ; but man is the one open way to the spirit of law, and therefore the final explanation of the machine must be found in man, and not that of man in the machine. Therefore, also, we can reach a further explanation of the world through man, than of man through the world ; and in the spirit of man we find an image of the all-pervading spirit of law and order. Man appears at last and illustrates all the inferior grades and explains each back step in the circle from God to God.

But that which is of pre-eminent importance in Man's moral and religious nature.

this preface to the Holy Scriptures is its explanation of man's moral and religious nature. His creation in the image of God accounts for ideals and aspirations, and duty and accountableness and conscience.

"Life and Letters,"  
p. 211.

"I am going to present my position," said James Hinton, "that the moral faculty in us is the true knowing faculty, that as in science we find the world rational, so in a true knowledge we shall find it right and good."

It would be well for us at times to inquire what we mean by "knowledge." The word may be used in a very arbitrary manner. It is easy to drop into a way of allowing it to be applied to one domain and refused to another, although we possess no more absolute acquaintance with that which is included in the former than with that which belongs to the latter.

For the sake of clearness, we will venture upon a very commonplace illustration. Let us take up an almanac, and turn over its pages to find when there will be a new moon. Now, when we have found it, we accept that information without questioning. Consider the character of

this knowledge. We see the date exactly recorded, and suppose that it has been derived from a reliable source. What then? Is it even on the part of the authorities themselves absolute knowledge? Have they comprehended the whole state of things upon which that conclusion depends? By no means! Is anything taken for granted by the astronomical calculators which they are unable to prove? Most assuredly! They have not comprehended the actual ground upon which the laws of phenomena rest, and they have assumed the uniformity of the laws of phenomena, or so-called laws of nature. Not for a moment am I calling these articles of faith in question, rather let us recognize to the full the strength of the faith which we have in such things as these, for faith assuredly it is. The faith is a most reasonable faith, not because we can argue it out, and relieve ourselves of the necessity for faith, but because we are creatures to whom such faith is a necessary element. I have referred to these things, that we may not regard the knowledge we have by means of conscience as of less authority than knowledge

we acquire by other means, simply because of the basis of faith, seeing that faith is also at the basis of our knowledge of physical facts.

Perhaps we have been taught that conscience is a development, that it can be traced in its earlier stages, that it emerges from a distant twilight, and that to understand what we men really are, we ought to look back from ourselves to the savage, from the savage to the ape, from the ape to one of the lowest members of the animal kingdom, and so back to the twilight of the senses, as previously we looked back to the twilight of reason and conscience; then we may be sent further to look for ourselves in the plant kingdom, and in the very lowest place there, and so on, until we come to a narrow chasm, beyond which is the inorganic with its two principles of matter and attraction, or a monad combining both.

I do not raise a doubt as to the probability of this fascinating theory. I only want you to consider how it bears upon the authority of conscience, on our distinguishing what is morally



right and wrong, and recognizing our responsibility to do the one and shun the other.

Notice, then, that the reason and even the senses are involved in the same process; and if evolution demonstrates the incompetence of conscience, it demonstrates likewise the incompetence of reason. We shall not refrain from seeing and hearing because there was a time when we could not see and hear, or when that from which we are lineally descended could not see and hear. We shall use our reason such as it is, now that we have it, without being affected by its previous absence. So, too, with conscience: having at last distinguished between right and wrong, the whole analogy of our other faculties is opposed to the thought of refusing the light to which we have become susceptible.

Man's creation in the image of God accounts for his being possessed by an ideal, which is not an instinctive memory from the process of evolution, but which is still beyond him, unattained and unrealized. It accounts for his highest aspirations; for as a child of man aspires to be manly, a child of God aspires to be Divine; it accounts for the

George Eliot. sense of duty, it explains this *imperative* fact, this  
 George Wilson of Edinburgh. *biggest word in the world*, by the thought of personal obligation.

“Two things fill me with awe: the starry heavens, and that sense of moral responsibility in man”—citing this confession of Emmanuel Kant, Professor Tyndall accepts it and expands it thus: “And in his hours of health and strength and sanity, when the stroke of action has ceased and the pause of reflection has set in, the scientific investigator finds himself overshadowed by the same awe. Breaking contact with the hampering details of earth, it associates him with a Power which gives fulness and tone to his existence, but which he can neither analyse nor comprehend.” And we may add, if that Power were such that man could analyse or comprehend, it would cease to give fulness and tone to his existence, and association with it would never more give rest.

Prayer is the approach, or attempted approach, of man to the infinite source of truth. Of course, all are aware of the fear and selfishness which has been put into prayer, and of the loathsome

degradation with which it has been associated ; but it would be as reasonable to think lightly of the faculty of speech because of the vile abuses to which it has been made subservient, as to think lightly of the faculty of prayer because it has been seduced into the service of the most revolting superstitions.

It matters but little by what stages this power has been gained. The sense of dependence, the sense of responsibility, the sense of a necessary cause, the sense of something lacking which can only be supplied from above, the need of some court of appeal from the appalling chaos of circumstances, mistakes, inequalities and distresses, the recognition of orphanage as orphanage—may have had a part in educing the faculty of prayer. But the cry, articulate and inarticulate, expressed in cultured phrase and flowing measure of classical liturgy, or in the wild jargon of untutored savages, the imploring cry, that God would rend the heavens and come down, indicates a higher nature in man.

Whether regarded as successful or unsuccessful, the venture of prayer is an index of man's

nobility. That he is a seeker after God is something more than his grosser nature can account for. Man is not content to remain bestial. Savages will disfigure themselves to dissemble their bodily likeness to the brutes, whilst other men discover their dissimilarity to all other members of the animal kingdom by the aspiration to get beyond self and enjoy communion with God.

Thus the six days are insufficient for man, with these alone his nature remains in partial eclipse, but when God shines upon him, the dim recesses of his being are flooded with light and his dullest task is brightened by a radiance not its own.

Man reflects rays from the infinite source of truth, and also from the infinite source of love, for  
1 St. John iv. 16. “he that abideth in love abideth in God, and God  
Prov. iv. 18. abideth in him.” Moreover, “the path of the righteous is as the shining light which shineth more and more unto the perfect day.”

“Man is not man as yet,  
 Nor shall I deem his object served, his end  
 Attained, his genuine strength put fairly forth,  
 While only here and there a star dispels

The darkness, here and there a towering mind  
O'erlooks its prostrate fellows, when the host  
Is out at once to the despair of night :  
When all mankind alike is perfected,  
Equal in full-blown powers—then, not till then,  
I say, begins man's general infancy

—Prognostics told

Man's near approach ; so in man's self arise  
August anticipations, symbols, types  
Of a dim splendour ever on before  
In that eternal circle life pursues.

BROWNING.



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## CHAPTER V.

Now, why should we call this Biblical prologue *Man's charter*, with obvious reference to the Magna Charta of English liberty? What is there to warrant this particular association of ideas? The first chapter of Genesis clearly asserts man's title to the freedom of the universe. It amply justifies the instinctive claims of the scientist to understand, and of the handicraftsman to avail himself of the things about him. It puts into words and substantiates the Rights of man which have been partially assumed.

The authenticity of this Charter is vindicated by every human success, whilst its authority to inspire with hope and aspiration becomes clearer as the growing light of man's progress realizes in some degree the immense endowment which this Charter affirms to be his rightful portion.

This Charter stimulates us to advance from "the

mere dumb wonder of ignorance" to the reverential admiration of ever-increasing knowledge. It lifts us up from the "grovelling awe of the supernatural as exhibited in the fetish-worshipper to the hopeful humility of the children of God."

The first chapter of Genesis is a dispensation from any despicable estimate of humanity, and from an enervating dread of the objects and secrets and powers of nature. It accentuates the dignity of man. It tells him what he is. It grants him the freedom to work. Its information is a passport to education. The first chapter of Genesis is the justification for the pursuit of investigations in the external world, and for the adaptation of discoveries to extend the power and authority of man. Here is a starting-point from which all specialists may journey with the blessing of man and God: here they may return after every extension of man's dominion, after every mental and moral elevation of mankind, to regain a proportionate view of their little sphere of activity, and humbly and thankfully attest the validity of this great title-deed of the human family. Here in this grand simple outline there is common ground on

which learned and unlearned can meet to consider the facts of nature and life. The language of light is simple enough for the peasant and profound enough for the philosopher.

The first chapter of Genesis could never have instructed man in the details of physical science, but it can urge him to discover those details for himself, and its broad outlines can accommodate all his acquired knowledge. It expressly refuses a monopoly of man's devotion, but it hands over to him the whole world as that of which he must make himself the master. It sends us to the work, and there we shall find the significance of its words. Etymology and syntax are incapacitated for defining the meaning of its language, because this is allied to the abiding facts of the world. Words such as light are protected from the assaults of verbal quibbling by the great outward permanent facts with which they are in alliance, and which strengthen their symbolic power over and above that derived from mere syllables. Fresh accessions of knowledge exhibit more of the fulness of the world and therefore of this record; but the obvious facts of the world and their interpretation

by this charter are of the greatest practical importance to the millions who are "no scholars."

The first chapter of Genesis is a support to the noblest impulses of man, an outward token of his birthright that he should not discredit his loftiest aspirations by the fear that, after all, they are but fancy-bred. With this he can appeal against the unconstitutional claims of his animal nature.

This chapter of Genesis is the patent of man's nobility, and shows that in which his nobility consists. It tells of his creation in the Divine image, and exhibits the God-life as a life of activity.

Man liberated,  
not from work  
but for work.

Thus this Charter sets him free to live as God lives, and encourages him to realize by effort the idea of his existence.

Therefore, whoever a man may be, whatever his place in the world, it is his privilege to find his work and do it. He can make this affirmation, "My father worketh even until now, and I work."

St. John v. 17.

This beginning of the Bible discourages the thought of attaining one's desires anywhere off the

Divine road of work. By a positive exposition of the great Architype's set purpose and performance, the spirit is rebuked that would wait upon chance. It is not sufficient for a man to work like a horse, he must work like God. There is a fundamental difference between the two similitudes, and realizing the right one, distinguishes man from the brutes. Voluntary, self-originating, thought-determining, thought-selecting activity differentiates us from our fellow-creatures in the animal kingdom. We not only can do this or that, but we can choose to think about this or that, and set our minds upon a purpose and accomplish it. The infinite variety of man's achievements, testify to the use he has made of this freedom. The constant changes and individual differences in our manner of life, in our homes and domestic details belonging to them, in our employments and all business concerns, in our knowledge and in our ideas, bear witness to the originality and freedom of our activity.

This Charter, while it explains and justifies the "towering mind," that o'erlooks its prostrate

fellows, would awake the slumbering to stand up and act the man.

The student baffled in his studies, tempted to take what he finds as an accident, a mere happening-to-be-so, disposed to ignore facts in to-day's problems, because they or their equivalents are a quadrillion years old, may here find encouragement for the better spirit that tells him of there being intense meaning everywhere, and persuades him to persevere towards an adequate solution, and to ignore nothing in spite of inconvenience and the upsetting of theories.

This Charter would not permit man to be satisfied with the thought and contemplation of mere sequences, of stories which tell only of this following that, of one thing being antecedent to another; it points to a Cause in whose image the personality of man is created, and so offers an escape from the panoramic view of the universe.

There is work to be done and knowledge to be acquired without risk of over-production. Man as man works to fill his place, not his pocket. If all had heeded the command to work, which the capacity for work and an inquiring mind and the

incessant six days of God's working have all along been urging, instead of too often waiting to be coerced by animal wants, the world would not have been so overtaxed with arrears, and a double portion would have been gathered against the day when nothing was to be expected.

Whether or no a particular individual needs to learn and labour in order to obtain what is called a livelihood, he must do this to attain a true manly state of living. Men are invited to be workers together with God in order to be men. Those who are nothing but consumers reject this Divine invitation. It matters not whether he places himself at the street corner, or lounges in some luxurious haunt of idleness, whether he begs his bread or buys it, the man who is able to work and yet lives without exertion is a human parasite.

The kingdom assigned to man in this Charter has not yet been fully taken possession of. Such a kingdom must be well known before its sceptre can be efficiently wielded. The empire of man awaits its consummation. Energy is essential to man for the acquisition of his own life. "Behold I

Cf. Deut. ii.  
24.

Cf. St. Matt.  
xi. 12.

have given, saith the Lord; begin to possess." The kingdom of Heaven must be forced, and the forceful are grasping it.

Workers not  
simply wage-  
earners.

It is necessary for most men to consider the subject of wages. They must procure the means of living in order to work, although they have transcended the thought of working being only a method of procuring the means of living. Wages must needs be of great importance even to those who live to work instead of merely working to live. But wages have no right so to condition work as though they were the sole meaning of it. Workers are something more than wage-earners. Wages or no wages, it is the prerogative of man by his own proper energy to originate light and order and achievements.

This Charter would show us that not to work is a disgrace. By it we should learn to appreciate every honest work that needed to be done, and cease to reckon good work as such only because it commands a high price. By attending to this, the time might indeed come when the word "menial" as applied to work should, as already foreshadowed in fiction, be obsolete, the



evening confusion in men's hearts and minds giving place to morning.

The murmurings of employers, the scantiness of success, the frequent failures, and miserable discouragements might be more bravely borne if men learned and laboured because the freedom to do so is part of their inheritance as men.

This Charter, with good reason, might be taken as the motive for such awakening words as these :

"I too could now say to myself : Be no longer a <sup>" Sartor Resartus.</sup> chaos, but a world, or even a worldkin. Produce !

Produce ! Were it but the pitifullest infinitesimal fraction of a Product, produce it, in God's name !

'Tis the utmost thou hast in thee ; out with it,

then. Up ! up ! Whatsoever thy hand findeth <sup>Cf., Ecc. ix. 10.</sup>

to do, do it with thy whole might. Work while <sup>Cf. St. John ix. 4.</sup>

it is called to-day ; for the night cometh, wherein no man can work."

The Great Ruler is manifested herein as the absolute Illuminator, and man is represented as <sup>To "arise and shine" a constitutional proceeding.</sup>

created in His image. Moreover, the thoughts of illuminating and ruling are combined in what is said of the sun and moon, which are, therefore, typical of what God is, and of what man should

be. Thus the idea of government as being for the benefit of the governed is brought before us in this first Charter, and is accentuated by the contrasted authority to "subdue and have dominion" which was given to man to be exercised over the earth and the beasts which inhabit it. To "arise and shine" is not a selfish proceeding, but one which naturally follows a particular endowment; it is that alone which befits the constitution of things when the light is come.

The record of  
Revelation  
solves the  
problem.

The unassisted study of nature might never have led to a general and settled conviction that man is created in the Divine image. Yet the poets of old felt that man was the offspring of God; and the modern scientists, by speaking of man's *godlike intellect*, of religious feeling being *as much a verity as any other part of human consciousness*, of man as reflecting rays from *the infinite source of truth*, and of his being associated with an incomprehensible power which gives fullness and tone to his existence, show plainly that they recognize certain traits in the nature of man which his creation in God's image adequately explains.

To the man who realizes the human characteristic of searching for God, Revelation becomes the most reasonable thing in the world. A child deprived of his parents is unable to define the need he feels, much less to create its satisfaction ; but he can take his part in the relationship when mother and father are restored ; he cannot analyse or comprehend fatherliness, but he has a practical though inadequate appreciation of it. When a man, not as a scholar, or a mimic, or a *quidnunc*, but wholly as a man, becomes an inquirer after God, he is prepared to welcome God's own discovery of Himself. God seeks such Cf. St John v. 23. for His worshippers who themselves seek Him.

The eye cannot make light, but by it individuals have authority in the question as to whether they can see or no. This authority remains in spite of all hallucinations, false impressions, and mists of error. So it is with the want which sets man seeking for God : by this appetite individuals have authority in answering the question whether God has been found.

The revelation of the character of God which this story contains is in accordance with that

which the world displays of the invisible source and stay of its existence ; and man's apprehension of the world, and of the unseen order which the world indicates, is in perfect keeping with the position assigned him here, both in relation to the world and to God.

We might not by our unaided mental powers reach the conclusions to which this document leads us, but these conclusions, whether implicitly or explicitly adopted, whether hidden in the subsoil of his character or consciously confessed, are such as to impel man to work, encourage him in the pursuit of truth, and respond to his conscience.

In this particular also man's nature is satisfied : Will and order and character which man can regard as baseless abstractions only to his own utter undoing, are exhibited here as fundamental, being before all things, belonging to the nature of God, who is guarantee that man is not vanity.

This record points to a rational Source for *the stream of tendency which makes for righteousness*, and to the great Reality as the basis for man's idea of duty.

Thus the authenticity of this Charter is attested

by its continuing to supply through the ages a revelation which accords with man's increasing knowledge, and in outline completes that knowledge for practical purposes.

By His first *creation* God received a mechanical service, by His second *creation* an instinctive service, by His third *creation*, which was man in His own image, He induces gradually a conscious service. When it is seen that the service required of man is the full normal use of his faculties, the liberty from all bondage of bestiality which would limit his manliness, the taking possession of the endowments without which he would cease to be man, then it will be recognized that this service is perfect freedom, and the document which enunciates it is not a ban or interdict, but a charter of liberty.

Freedom is not negative, but positive. It consists, not in the absence of hindrances, but in the possession of capacities; not in being left to follow one's own likings, however limited, but in being furnished with inclinations which pursue their purposes in the whole depth and breadth and height of existence.

Service  
perfect free-  
dom.

Positive  
liberty.

A child is not less free than a man, because it is subject to parents and schoolmasters, but it is subject because it is less free. Its attachment to the largeness of adult life is its only possible escape from the trammels of its own physical mental and moral littleness. A lost child is in worse bondage than one in leading-strings, and a father's guiding hand is its truest freedom.

The extent of man's freedom must be measured by his nature. Therefore the Biblical preface is fitly called the Magna Charta of mankind; for it declares that GOD CREATED MAN IN HIS OWN IMAGE, IN THE IMAGE OF GOD CREATED HE HIM; MALE AND FEMALE CREATED HE THEM.

*THE END.*



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